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IMPERIAL ETHIOPIAN GOVERNMENT
OFFICE OF THE PLANNING BOARD

Ethiopia Planning Board

IMPLEMENTATION OF THE FIVE YEAR PLAN

EVALUATION REPORT FOR THE PERIOD 1949-1951 E. C.

27 MAY 1970

ADDIS ABABA
November 1959

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INTRODUCTORY NOTE

This Report has been elaborated at the request of H.E. Minister of Commerce, Industry and Planning, Ato Makonnen Habtewolde. The Planning Office has prepared a number of forms and questionnaires for each development department according to which statistical data and other information necessary for the elaboration of an evaluation report should have been collected by the departments concerned and placed at the disposal of the Planning Office. The majority of the departments made considerable efforts in collecting and preparing the requested data and information, and succeeded in supplying the Planning Office with the bulk of the material. They should be congratulated for their efforts and achieved results. However, deficient data and information furnished by other departments represented a serious difficulty in preparing comprehensive analyses for some development sectors, Nevertheless,it is hoped that the Report has succeeded in giving a sufficiently clear picture of the hitherto implemented Five-Year Plan both as a whole and in particular development sectors.

The suggestions and recommendations concerning the further implementation of the Plan have not been included in this Report. They have been elaborated and presented at various occasions in separate documents issued by the Planning Office ("List of Documents Issued by the Planning Office" Doc.5 and Annex II). The concrete measures and projects to be taken in 1952 and 1952 E.C. will be comprised by Working Programmes which are being prepared by all development departments according to the decision of the Planning Board Committee.

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SYMBOLS

-	Category non applicable
...	Data not available
0	Magnitude nil (or negligible)
( )	Incomplete and/or insufficiently verified data
1)	Footnote to table

I. SUMMARY OF FINDINGS

General Appraisal

1. During the first three years of the implementation of the Five-Year Plan considerable efforts were made and significant results achieved almost in all sectors of economic and social development. There was an increase in the total budgetary revenue from Eth.$ 124 in 1948 E.C. to Eth.$ 161 million (estimate) in 1951 E.C.; in total budgetary expenditure from Eth.$ 125 million in 1948 E.C. to Eth.$ 188 million (estimate) in 1951 E.C.; in total monetary investments from Eth.$ 57 million in 1949 E.C. to Eth.$ 89 million in 1951 E.C.;in the production of electric power from 67 million kWh in 1948 E.C. to estimated 86 million kWh and the new Koka hydro-electric plant will be put in operation very soon; in the value of industrial production from Eth.$ 72.5 million in 1948 E.C. to Eth.$ 83.3 million in 1950 E.C.; the highway development programme, civil aviation development programme, sea-port development programme and telecommunications development programme were launched; in the field of agriculture and forestry many development activities and projects were initiated; the expansion of education was remarkably accelerated: from 1948 to 1951 E.C. the number of students enrolled for Primary Schools increased from 80 486 to 108 995 (Eritrea excluded); in Middle and Secondary Schools from 14 365 to 30 964 (Eritrea excluded); in Schools of Higher Learning from 345 to 760; the development efforts in the field of public health were notably intensified which could be seen from a substantial increase in total development costs in the course of 1949 E.C. (from Eth.$ 6.5 million to Eth.$ 9.6 million).

2. However, the rate of development as foreseen in the Five-Year Plan was not attained over the period 1949-1951 E.C. If compared with the Plan this slower rate is clearly revealed by a comparison of planned and realised investment costs. According to the dynamics of the Five-Year Plan during the first three years about 51.6% of the total investment should have been realized. Actually the investment costs during 1949-1951 E.C.reached 44.2% only. According to the degree of the realisation of planned investments all economic and social sectors could broadly be divided into 3 groups:

the first covering the sectors where the planned rate of investments was overpassed; the second, in which this rate was slightly below the planned one, and the third group where the attained rate was noticeably below the planned rate. There were three sectors belonging to the first group: housing, where the realised investments reached 109.7% during 1949-1951 E.C.as compared with 51.6%, as a general planned rate for the same period, administration with 65% and electricity with 62.8% of realized investments. The sectors belonging to the second group were: education (47.5%); manufacturing industry (43.1%) and transport and communication (41.5%). However,some important sectors should be classified in the third group: agriculture and forestry (36.9%), public health (25%) and mining (7.7%). If the lag in investment costs should be expressed in terms of time one might say that the total investments during 1949-1951 E.C. were lagging for about half a year and so were the investments in transport, communications and education,while these in agriculture and forestry showed a lag of about one year, in public health of one year and a half and in mining of some two years.

3. The abovesaid lags in investment and other development costs as well as in general pace of development as compared with the rate foreseen by the Five-Year Plan seem to be due-generally speaking - to the following reasons:

- The Five-Year Plan was officially adopted and put into force by the middle of 1958 Greg.Cal.i.e. about one year and a half following the date indicated in the Plan (the beginning of 1957 Greg.Cal.).
- The current policy, budgets and activities of development departments were not adapted to a sufficient degree to the requirements and tasks of the Five-Year Plan.
- The existing organizational structure as well as methods and procedures of public administration were not sufficiently developed and adjusted to the needs of a planned and expanding economy particularly of the so-called development departments. The inefficiency of most of development departments and agencies in preparing,administering and implementing development programme and projects was most obviously reflected in a slow utilization of foreign loans and assistance as well as of domestic budgetary funds available for financing the development projects.
- The substantial drop of coffee prices on the world market during 1950-1951 E.C. resulted in an adverse effect on the export and balance of payments position as well as on the budgetary revenue and over-all economic ectivity in 1951 E.C.

4. The further implementation of the Five-Year Plan will in broad terms depend upon the following factors:

- The degree and efficiency in adjusting the annual budgets, current policies and activities of development departments to the Five-Year Plan and to the actual conditions.
- Improvements in the organisation, methods and efficiency of public administration, particularly of development departments.
- The efficiency in utilizing the available foreign loans and in establishing new industrial, agricultural and other projects.
- The further development of coffee prices on the world market and of the terms of trade in general.

All the above-mentioned factors were fully discussed in many documents worked out by the Planning Office (see Annex II).

5. Taking into account the existing lag in the realization of development costs and other tasks on the one hand, and the forecasts of the Five-Year Plan on the other, one may say that the main targets of the Plan could be achieved in 1962 Greg.Cal. instead in 1961, provided the combined effect of the above factors influencing the implementation of the Five-Year Plan was predominantly favourable. If the combined effect of the above factors proved on the average unfavourable the implementation of the main targets of the Plan might be prolonged by 1963 Greg.Cal.

Budget

6. The volume of domestic budgetary revenue realized during the period 1949-1951 E.C. was in accordance with the Five-Year Plan's forecasts. The Plan has foreseen for the above period the domestic budgetary revenue at an amount of Eth.$ 429 million, and Eth.$ 420 million, i.e. 97.9% was actually collected.

7. On the other hand, the budgetary revenue from foreign sources, namely the realization of foreign loans, was lagging seriously behind the Plan's forecasts. It was assumed in the Plan that the volume of foreign loans to be realized during 1949-1951 E.C. should reach Eth.$ 74 million. However, only Eth.$ 32 million, or 43.2% was actually spent on that account.

8. The total budgetary expenditure realized during the period 1949-1951 E.C. was somewhat lower if compared with the provisions of the Plan. The Plan's figure is Eth.$ 549 million whereas Eth.$ 508 million,i.e. 92.5% was realized over the same period.

9. It is of particular importance to point out the lag in the budgetary capital expenditure: out of the planned Eth.$ 197 million for the period 1949-1951 E.C. only Eth.$105 million or 53.3% was realized.

10. However, the actual expenditure on the account of salaries and "other expenditure" showed the tendency of a rapid increase above the planned rate: according to the Plan Eth.$ 344 million should have been provided for salaries and "other expenditure" for the period 1949-1951 E.C., but the actually spent amount reached Eth.$ 390 million, or 113.4%.

Investments

11. According to the Five-Year Plan the monetary investments in 1949-1951 E.C. should have been Eth.$ 276 million but actually they amounted to Eth.$ 236 million or 86% of the planned amount.

12. While the total amount of investments realized during 1949-1951 E.C. was not substantially lower than the planned figures, there were considerable differences between the actual and forecasted figures in some development sectors. Investments in mining, agriculture and public health were substantially lagging behind the Five-Year Plan forecasts, reaching only 8%, 37% and 25% respectively of investments foreseen for the above sectors for the five-year period. On the other hand investments in housing were much higher than foreseen in the Plan, as they came to 110% of the investments foreseen for the whole five-year period.

13. As far as financial sources of investments are concerned the most important features revealed by available data are considerable lags in the realisation of domestic budgetary investments (36% of the amount foreseen for five years), in utilization of foreign loans (25% of the amount foreseen for five years), and in attracting foreign private capital (17% of the amount foreseen for five years). On the other hand, the volume of domestic bank loans, of reinvestments of public enterprises, of domestic private investments as well as of foreign aid was higher than forecasted by the Plan, reaching 62%, 169%, 94% and 79% respectively of the amounts foreseen by the Plan for the mentioned sectors for a five-year period.

Foreign Trade

14. The export showed a lag behind the Plan's forecasts. The value of export during the period 1949-1951 E.C. had been foreseen to Eth.$ 580 million but the realized value amounted to Eth.$ 517 million, i.e. 89.1% . Particularly unfavourable was the export trend in 1951 E.C. when the value of export attained a figure of Eth.$ 170 million or 82.9% as compared with Eth.$ 205 million foreseen by the Planned Trend.

15. The main cause of the lag in the value of exported commodities was the stagnating and even downward tendency in the export of coffee. The Five-Year Plan has foreseen an export of 145 000 t. of coffee at a value of Eth.$ 355 million during 1949-1951 E.C. Actually only 130 000 t.(90.4%) was exported at a value of Eth.$ 311 million (87.6%).

16. The export of other commodities was lagging, too,(oilseeds,cereals, live cattle, hides,chat, etc.). The value of "other export" during 1949-1951 E.C. was foreseen at Eth.$ 225 million while the realised value came to Eth.$ 206 million, or 91.6%.

17. While the export was lagging the import was somewhat larger than planned. The Plan has reckoned for the period 1949-1951 E.C. with an import of Eth.$ 537 million but in reality the value of import over the same period reached Eth.$ 568 million,i.e. 105.8%.

18. A particularly unfavourable trend concerning the import was a too rapid increase in the import of consumption goods and goods in process (realised Eth.$ 427 million in 1949-1951 E.C. as against the forecasted Eth.$ 384 million, or 108%), whereas the import of capital goods was below the planned amount (realised Eth.$ 141 million as against the foreseen Eth.$ 153 million, or 92.2%.

19. According to the above-mentioned foreign trade trends the trade balance and the balance of payments position as experienced in the years 1949-1951 E.C. were more unfavourable than anticipated by the Five-Year Plan. The Plan has anticipated for the above years a positive trade balance at an amount of Eth.$ 43 million; in fact, the trade balance was negative at an amount of Eth.$ 51 million. The total balance of payments for the three years was supposed to be negative at the amount of Eth.$ - 66 million, but actually it was still much worse : it reached Eth.$ -104 million.

Particularly serious was the deterioration of the trade balance in 1951 E.C., when the negative trade balance amounted to Eth.$ 38 million.

Agriculture

20. The development costs spent on agricultural development from public sources during 1949-1951 E.C. were substantially lower than foreseen by the Plan. The total public investments in agriculture during the mentioned period amounted to Eth.$ 4 272 000 or 42.7% as compared with Eth.$ 10 009 000 foreseen by the Plan for the same period. The public operating expenditures totalled Eth.$ 8 684 000 or 62.5% of the planned figures of Eth.$ 13 896 000.-

21. However, this does not mean that the development activities in agriculture were stagnating. Although the planned rate of agricultural development was not attained during the first years of the implementation of the Five-Year Plan, significant efforts were made in many aspects of agricultural improvement. If these efforts were expressed in terms of development costs the total amount financed from public sources would show an increase from Eth.$ 3 787 000 in 1949 E.C. to Eth.$ 4 976 000 in 1951 E.C. or by 31.4%.

22. Significant expansion could be noticed particularly in the field of agricultural education, agricultural research, coffee development and plant protection. In the above fields the majority of tasks foreseen by the Plan were being implemented to a satisfactory degree.

23. As far as Extension Service and Veterinary Service are concerned, in spite of some efforts made by the Ministry of Agriculture, their expansion was far below the planned rate. The Five-Year Plan has foreseen the establishment of a network of the Extension Service institutions: 6 Improvement Centres, 30 Agricultural Stations, 230 Male Breeder Stations, but so far the realisation of this programme has not yet started. The above services have been given a central place in the agricultural development as conceived by the Plan, and the slow rate of their expansion will have adverse effects upon the realization of the entire agriculture programme.

24. Land Settlement is a very important part of the Five-Year Plan. The Plan has foreseen to invest in Land Settlement Eth.$ 8.7 million from public sources covering an area of about 40 000 ha of cultivable land. During the period 1949-1951 E.C. the realisation of Zula Land Development Scheme started and about Eth.$ 2 million was spent. There are good prospects for implementing that aspect of the Five-Year Plan, as a result of the recent Proclamation of His Imperial Majesty.

Forestry

25. In the course of the first three years (1949-1951 E.C.) out of the total amount of Eth.$ 2 342 000 as foreseen by the Plan to be spent on forestry Eth.$ 1.5 million or about 64% was realized. Out of Eth.$ 1 309 000 as foreseen in the Plan for investment, Eth.$ 635 000 or some 69% was actually spent. Out of the planned Eth.$1 033 000 for operating costs, Eth.$ 874 000 or 85% was spent.

26. In order to establish a forest inventory aerial reconnaissance of forests was carried out (about 12 000 km. flights) and an archieve of about 13 000 aerial photographs was established.

27. The production of seedlings was increased from E.$ 1.3 million in 1957 to about 8 million in 1951 E.C.

28. The Forest Department in the Ministry of Agriculture was organized and the forest conservatorship in Shoa Province set up. The Forest Research Institute is nearly completed and equipment therefor secured. A Forest School in Ambo and a practical training center in the National Park Managasha were established.

Mining

29. Although the development activities and investment costs in mining rose considerably in 1951 E.C., they were lagging far behind the dynamics foreseen by the Five-Year Plan. The budgetary investments during 1949-1951 E.C. amounted to Eth.$ 1 353 000 or 24.2% of the planned amount for five-years (Eth.$ 5.6 million). The total investment reached only Eth.$ 2.9 million, or 7.7% of the volume foreseen for the five-year period (Eth.$ 37.6 million).

30. On the other hand the production of gold, presently the main mining product, increased substantially in 1951 E.C. exceeding even the Five-Year Plan figures. The production of gold in 1951 E.C. rose to 1 394 kg., while by the Five-Year Plan an output of 932 kg. was foreseen for 1953 E.C.

Electricity

31. The total investment realized in the sector of electricity during the period 1949-1951 E.C. amounted to Eth.$ 27.2 million i.e. 62.8% as against Eth.$ 43.3 million foreseen by the Plan for a five-year period. Consequently, one can reckon with a complete implementation of the Plan in terms of investment.

32. New power plants put into operation up to now have a total capacity of 14 251 kW. The HEP Koka, which will be put into operation in a few months, will have the capacity of 43 200 kW. This will bring the total increase of electric power generating capacities to 57 415 kW. Including the old capacities the total power of public plants will come to about 81 700 kW i.e. 121.9% as compared to the Plan's forecast of only 67 100 kW.

33. The total production of electricity increased from 73 million kWh in 1948 E.C. to 86 million kWh in 1951 E.C. The Five-Year Plan has forecasted the consumption of electric power to come to 90 million kWh in 1953 E.C., which will be probably reached or even surpassed, this depending not upon the supply but rather upon the effective demand for electricity.

Manufacturing Industry

34. Gross Output of manufacturing industry reached Eth.$ 83.3 million in 1950 E.C., or 47.5% of the gross output foreseen by the Five-Year Plan in 1953 E.C. (Eth.$ 175.5 million). The most favourable development may be noticed in the case of food-processing, textile, leather and foot-wear and tobacco industry.

35. Investments in the field of manufacturing industry during 1949-1951 E.C. are estimated at Eth.$ 24.6 million, or 43% of the total investments foreseen by the Plan for five-year period (Eth.$ 57.1 million). Investments during 1949 E.C. and 1950 E.C. were rather low (Eth.$ 5 million and 6 million respectively), whereas in 1951 E.C. there was a substantial increase reaching Eth.$ 13.6 million.

36. The available foreign loans offer a very good prospect for the further industrialization of the country and for the implementation of the Five-Year Plan. The industrial projects which are at present negotiated and which could be expected to be built and put into operation by 1954-1955 E.C.

may yield an output estimated at Eth.$ 120-130 million. Hence, the total gross output in 1954-55 may reach Eth.$ 200-250 million, if the preparatory works and launching of new industrial projects financed from the available foreign loans would start as soon as possible. The Plan has foreseen an output of Eth.$ 175 million by 1953 E.C. and Eth.$ 218 million by 1954 E.C. It follows that the industrial targets of the Plan could be reached or even surpassed one year later than foreseen.

Transport and Communications

Road Construction and Maintenance

37. The total investment costs during the period 1949-1951 E.C. spent on highways construction and maintenance amounted to Eth.$ 34 million or 28.3% as compared with Eth.$ 120 million foreseen in the Five-Year Plan for the whole five-year period. Eth.$ 21.3 million was spent on maintenance and Eth.$ 12.7 million on new roads.

38. The main reason for such a serious lag in this vital sector of economic development was not the shortage of financial funds. The funds available from both domestic and foreign sources during the period 1949-1951 E.C. amounted to Eth.$ 51.4 million, out of which only Eth.$ 34 million (66.1%). was actually spent.

Motor Vehicles and City Traffic

39. The purchase of new trucks was well as buses for city traffic was in accordance with the forecasts. of the Plan. The Plan has foreseen an amount of Eth.$ 15 million to be spent on the purchase of new trucks during the five-year period, while the value of new trucks purchased during 1949-1950 E.C. reached Eth.$ 10.7 million. The similarly favourable development occurred in the sector of city traffic (purchase of new buses and pickups and improvement and modernization of street network in Addis Ababa).

Railway

40. The level of investments for maintenance and betterment of the two existing railway lines (Addis Ababa-Jibuti and Agordat-Massawa) was considerably lower than forecasted by the Plan. The total amount foreseen in the Plan

for that purpose over the planned five years was Eth.$ 9 million while the actual investment during 1949-1950 E.C. attained only Eth.$ 1.6 million, i.e. 17.8%.

Aviation

41. The purchase of aircrafts and flight and other equipment during the period 1949-51 Eth. Cal. was in accordance with the Five-Year Plan's forecasts. Out of Eth.$ 32 million foreseen by the Plan for that purpose for the entire five-year period Eth.$ 18.2 million is expected to be spent during 1949-51 Eth. Cal. i.e. 57.0%, financed mainly by the EXIM Bank Loan. Therefore, it could be expected that the Five-Year Plan in that respect will not only be implemented but also surpassed.

42. On the other hand, the construction and development of airports was lagging behind the Plan's forecasts, although financial funds were available. The investment costs foreseen in the Plan for that purpose for five years were Eth.$ 15.5 million; only Eth.$ 4.4 million is expected to be spent during 1949-1951 Eth. Cal.

Ports and Seashipping

43. The investments in Assab Port which according to the Five-Year Plan were supposed to amount to Eth.$ 24 million will actually come to Eth.$ 26 million. The part of those investments realized in 1950 and 1951 E.C. amounted to Eth.$ 8 million (mostly executed in 1951 E.C.).

44. The amount of Eth.$ 4.5 million was foreseen in the Five-Year Plan to be spent on the purchase of ships. In the course of 1949-1951 E.C. (9 months) new ships were purchased for Eth.$ 2.2 million i.e. about 50% of the Five-Year Plan forecast.

45. The traffic in the domestic ports of Assab and Massawa was increased, particularly that in the port of Assab, attaining 315 000 tons in 1958 Greg.Cal., as compared to 233 000 t. in 1956.

Posts and Telecommunications

46. During the period under review (1949-1951 Eth. Cal.) the investment costs in the field of telecommunications amounted to Eth.$ 4.5 million, as compared with the planned Eth.$ 10 million for five years(45%).

In view of the fact that in the absence of a foreign loan all the investment costs were financed from domestic sources the above volume of investment could be considered as satisfactory. It is expected that now a foreign loan for telecommunications will be concluded, which will enable the succesful implementation of the Plan in the remaining two years.

47. Although in the Five-Year Plan there are no special provisions for the development of posts during 1949-1951 Eth. Cal. Eth.$ 1.9 million was spent on the expansion of this important service. A constant increase of letter mail and parcel post will require further extension of post services.

Community Development

48. A number of departments (Ministry of Agriculture, Ministry of Education, Ministry of Public Health, Ministry of Public Works) initiated and carried out in the course of 1949-1951 E.C. various activities and projects, which have some features of community development. But these projects are not community development projects in the sense of the Five-Year Plan. The total costs of these projects and activities during 1949-1951 E.C. amounted to Eth.$ 8 210 000, mostly in the field of education, agriculture and public health.

49. The community development programme as conceived and incorporated in the Five-Year Plan has not yet practically started. The total development costs of this programme foreseen by the Plan come to Eth.$ 25 million, while the budgetary expenditure of the Ministry of Community Development during 1949-1951 E.C.,exclusive of the contribution to H.I.M.Welfare Trust,amounted to Eth.$ 1 342 507.

Education

50. The basic problem in the implementation of the Five-Year Plan in the sector of Education during the years 1949-1951 E.C. was a too slow expansion of Primary Education. The Plan has foreseen 211 200 pupils to be enrolled for Primary Schools by 1953 E.C. In 1951 E.C. that number reached 109 000, or about 50% of the number foreseen for 1953 E.C.,indicating that it will be impossible to fulfil the Plan in the field of Primary Education.

51. On the other hand, the expansion of Middle Schools was much faster than planned. The number of students enrolled for Grade 8, in 1951 E.C. was 4 270 as compared with 3 200 students foreseen in the Plan for 1953 E.C.

52. The most favourable development was witnessed by Academic Secondary Schools. The total number of enrolled students was more than doubled during 1948-1951 E.C.: it rose from 2 097 to 4 496. The number of students in Grade 9 in 1951 E.C. (2 104) surpassed substantially the number foreseen by the Plan for 1953 E.C. (700).

53. There was also a successful implementation of the Plan in the field of Special Secondary Schools. The Plan has foreseen that the total number of graduated students during the five-year period will come to 2 318, whereas already during the first 3 years the graduated students reached a number of 1 087 or 47%. Only in the Commercial School is the implementation of the planned objectives endangered.

54. The enrollment for Schools of Higher Learning increased from 466 in 1949 E.C. to 760 in 1951 E.C. During the same period 190 students graduated as compared with 440 foreseen by the Plan for the whole five-year period. It could be expected that the planned number of degreed people would almost be attained, although the planned requirements (600-800 degreed people) would not be covered, because a large number of University College graduates will be sent abroad for further studies and specialisation.

55. Development costs were on the whole in conformity with the Plan, the expenditure from domestic sources being somewhat below and the expenditure from various foreign sources above the planned level. The total development costs during the period 1949-1951 E.C. amounted to Eth.$ 69.4 million (Eth.$ 61.2 million from domestic and Eth.$ 8.2 million from foreign sources) as compared with Eth.$ 126.4 million foreseen by the Plan for the five-year period. It follows that the total expenditures on education were realised during the first 3 years by 54.9% Besides such a general favourable trend there remains the problem of stagnation in Educational Tax which is the main source for financing Elementary Education.

Public Health

56. There is no public health programme included in the Five-Year Plan. Only global budgetary development costs have been foreseen by the Plan. It has been foreseen that the total budgetary expenditure on Public health (excluding investments) during the planned five years should amount about Eth.$ 23 million while the budgetary investments expenditure has been foreseen at Eth.$ 10 million, plus Eth.$ 2 million from foreign loans and grants. During 1949-1951 E.C. the budgetary expenditure reached Eth.$ 17.1 million, i.e. **below** the amount foreseen by the Plan. To this sum about Eth.$ 4.4 million supplied by foreign assistance and loans should be added (excluding capital expenditures). It should be pointed out that the budgetary expenditure foreseen by the Five-Year Plan for public health proved to low. However, capital expenditures were much lower than planned: they amounted to only Eth.$ 3 million (Eth.$ 0.7 million from budget and Eth.$ 2.3 million from foreign assistance and loans) as compared with Eth.$ 12 million foreseen by the Plan.

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II. BUDGET

Budgetary Revenue

The comparison of the budgetary revenue dynamics as shown in the Five-Year Plan with the actuals in 1949-1950 E.C. may be seen in the following table:

Total Budgetary Revenue, 1949-1951 E.C.

Million Eth.$

	1949	1950	1951	1949-1951
Domestic Revenue				
Five-Year Plan	133	143	153	429
Actuals	136	141	143 1)	420
Difference	+3	-2	-10	-9
Foreign Loans				
Five-Year Plan	21	26	27	74
Actuals	8	14	10 2)	32
Difference	- 13	-12	-17	-42
Reparations				
Five-Year Plan	-	12	14	26
Actuals	-	13 3)	8	21
Difference	-	+1	-6	-5

1) Estimates of the Ministry of Finance
2) Preliminary estimates
3) Small differences as compared with "Investments" due to timing.

In connection with the above comparison the following should be pointed out:

- In the course of 1949 and 1950 E.C. the domestic budgetary revenues were in the whole corresponding to the Five-Year Plan forecasts. The estimated figures for 1951 E.C. are preliminary and probably will be surpassed.

- Lag in the realization of foreign loans was serious already in 1949 and 1950 E.C., and according to the incomplete data was further deteriorated in 1951 E.C. The utilization of the reparation funds was also behind the

Five-Year Plan expectations. Hence, the main lag in the budgetary revenue occurred in the utilization of foreign loans.

In order to evaluate the implementation of the Five-Year Plan concerning the structure of the domestic budgetary revenue below are given the Five-Year Plan figures as compared with the actuals in 1949 and 1950 E.C. and estimates for 1951 E.C.

Domestic Budgetary Revenue, 1949-1951 E.C.

Million Eth.$

	1949	1950	1951	1949-1951
Direct Taxes				
Five-Year Plan	30	34	39	103
Actuals	25	27	28	80
Difference	-5	-7	-11	-23
Indirect Taxes1)				
Five-Year Plan	19	21	25	65
Actuals	24	25	28	77
Difference	+5	+4	+3	+12
Custom Duties				
Five-Year Plan	48	49	50	147
Actuals	47	48	48	142
Difference	-1	-1	-2	-4
Other Revenue				
Five-Year Plan	32	33	35	100
Actuals	37	40	38	114
Difference	+5	+7	+3	+15
Extraordinary Revenue				
Five-Year Plan	5	5	5	15
Actuals	3	1	1	5
Difference	-2	-4	-4	-10
TOTAL DOMESTIC REVENUE				
Five-Year Plan2) . .	134	142	154	430
Actuals	136	141	1433)	420
Difference . . .	+2	-1	-11	-10

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1) Excise duty on alcohol, tobacco monopoly, motor fuel taxes, stamp duties and other indirect taxes.

2) Slight discrepancies due to round figures.

3) Preliminary estimates.

As it can be seen in the above table the most serious lag in domestic budgetary revenue occurred in Direct Taxes. There was almost a stagnation in collecting those taxes in spite of the fact that they contain the greatest potential source for increasing the budgetary revenue.

Budgetary Expenditure

The following comparison has been made between the figures as given in the Five-Year Plan and the actuals for 1949 and 1950 E.C. and preliminary estimates for 1951 E.C.

Budgetary Expenditure in 1949-1951 E.C.

Million Eth.$

	1949	1950	1951	1949-51
Salaries and Other Expenditure:				
Five-Year Plan	107	115	122	344
Actuals	111	134	145 3)	390
Difference:	+4	+19	+23	+46
Capital Expenditure				
Five-Year Plan	50	70	77	197
Actuals	30	39	36 3)	105
Difference:	-20	-31	-41	-92
Extraordinary Expenditure 1)				
Five-Year Plan	2.5	3.0	3.5	9.0
Actuals	3.7 2)	2.9	7.4 3)	14.0
Difference:	+ 1.2	- 0.1	+3.9	+5.0
TOTAL BUDGETARY EXPENDITURE				
Five-Year Plan . . .	159.5	188.0	202.5	549.0
Actuals	145.0	175.0	188.4	508.0
Difference . . .	-14.5	-13.0	-14.1	-41.0

1) Public Debt Repayment

2) Eth.$ 1.8 million paid by EAL

3) Rough estimates; some bigger discrepancies may occur in final data.

In connection with the foregoing comparison it is necessary to stress the following:

From the data of the Ministry of Finance on annual Governmental accounts, it is not possible the capital expenditure be precisely separated from other expenditures. Therefore, the capital expenditure in the foregoing survey represents an estimate. It comprises investments financed from foreign loans and the corresponding budgetary counterpart of the Ethiopian Government, as well as incomplete investments shown in the budget of some departments. One may estimate that a part of budgetary investments is excluded from these figures (part of contribution to TA Joint Fund, part of the budget of the Ministry of National Defence, etc.). Therefore, one may consider that the salaries and other charges are to some extent lower and the capital expenditure higher than the figures as shown above. Even after being thus rectified, the salaries and other charges, however, show a tendency of a quicker increase than as foreseen in the Five-Year Plan, whereas the capital expenditure considerably lags behind the forecasts. The lag in capital expenditure is due, first of all, to inadequate utilization of foreign loans and the Ethiopian Government Counterpart for road construction and aviation development.

The expenditure from domestic and foreign loans (reparations excluded) showed the following movement:

Budgetary Expenditure from Domestic and Foreign Sources in 1949-1951 E.C.

Million Eth.$

	1949	1950	1951	1949-51
Domestic Expenditure				
Five-Year Plan	138.5	151.0	162.5	452.0
Actuals	137.5	148.0	170.0 1)	455.5
Difference:	-1.0	-3.0	-7.5	+3.5
Foreign Loans				
Five-Year Plan	21	26	27	74
Actuals	8	14	10	32
Difference:	-13	-12	-17	-42

1) Preliminary estimates

It is clear from the above survey that the domestic budgetary expenditure in 1949 and 1950 E.C. showed only a slight lag behind the Five-Year Plan and that the main problem was encountered in its adequate allocation to administrative and development purposes. The actuals in 1951 E.C. will probably be higher than the Five-Year Plan dynamics but the expansion of administrative expenditure will persist. The lag in foreign loans utilization has already been pointed out.

Because of the already mentioned difficulty in distinguishing clearly the capital expenditure from the expenditure on salaries and other charges in some sectors it is not possible to establish quite definitely the increase in the administrative expenditure in those sectors which the Five-Year Plan has foreseen to increase not more than by 5% per year.

The comparison between the Five-Year Plan figures and actuals for 1949-1951 E.C. is shown below:

Budgetary Expenditure in 1949-1951 E.C.

Million Eth.$

	Actuals			Plan
	1949	1950	1951[1)]	1953
Agriculture, Education, Public Health and New Services (Total Expenditure) . . .	26	28	35	43
All Other Sectors (Expenditure on Salaries and Other Charges)	87	100	108	104

1)Estimates

Even if taken with some reserve the mentioned estimates show that the budgetary expenditure in the sectors foreseen in the Five-Year Plan to expand quickly, is lagging while the administrative expenditure in all other sectors is going up very speedily and will probably in 1951 E.C. exceed the Five-Year Plan figures for 1953 E.C. The position of agriculture, education and public health is generally better than shown above due to the fact that the greatest part of the foreign aid was spent on these sectors. Thus the foreign technical and economic assistance partly compensated for the insuffient budgetary funds allotted to the development of these sectors.

III. INVESTMENTS

The comparison between the Five-Year Plan figures and the estimated monetary investments in 1949-1951 E.C. is given below:

Total Monetary Investments 1949 - 1951 E.C.

Million Eth.$

	1949	1950	1951	1952	1953	1949-51
Five-Year Plan . .	73	93	110	124	135	276
Actuals	57	91	89 1)			237

1) Preliminary Estimate

The investments in the first three years reached 86% of the planned investments. After a satisfactory increase in monetary investments in 1950 E.C. when higher amounts were spent on electricity, roads and aviation a slight drop might be expected in 1951 E.C. although the final figures for that year are unknown yet. It is sure that in 1951 E.C. higher funds were utilized on manufacturing industry, housing, port of Assab and mining in comparison to 1950 E.C. but less was spent on aviation, roads, and probably on road transport vehicles.

In the whole period 1949-1951 E.C. public investments in agriculture, education and public health were low, and to a great extent dependent on foreign assistance. The investments in community development, foreseen in the Five-Year Plan at Eth.$ 25 million, were practically negligible. Foreign private investments in mining almost completely failed and public investments in exploration and modernisation of the existing mines were far below expectations.

The distribution of the monetary investments in 1949-1951 E.C. by industries was as follows:

Monetary Investments in 1949-1951 E.C. by Industries

Million Eth.$

	1949	1950	1951 (estimat.)	1949-51	Five-Year Plan 1949-53	% 5:6
1	2	3	4	5	6	7
Agriculture & Forestry	4.9	5.1	5.8	15.8	43.1	36.9
Mining	1.0	0.3	1.6	2.9	37.6	7.7
Electricity	2.7	14.5	10.0	27.2	43.3	62.8
Manufacturing Industry	5.0	6.0	13.6	24.6	57.1	43.1
Transport & Communicat.	26.1	42.1	31.5	99.7	240.0	41.5
Education	3.5	1.8	4.2	9.5	20.0	47.5
Public Health	0.5	1.2	1.3	3.0	12.0	25.0
Administration	2.9	2.0	1.6	6.5	10.0	65.0
Housing	7.7	11.4	13.8	32.9	30.0	109.7
Others	3.0	6.3	5.5	14.8	41.5	35.7
TOTAL:	57.3	90.7	88.9	236.9	534.6	44.3

Bearing in mind that the implementation of the Five-Year Plan in 1949-1951 E.C. should be 51.6% on the average it may be seen that the investments in most development sectors were lagging behind the Five-Year Plan figures.

It is known that the development of agriculture, education, public health and community development is highly dependent on the government budget. Manufacturing industry, mining, housing, etc. are financed mostly from private sources; transport and communications are financed through budget and foreign loans; the bulk of investments in electricity comes from reparations.

In connection with the previous table it should be pointed out that the investments in the manufacturing industry foreseen in the Five-Year Plan were those in new industrial projects and the estimates of total gross monetary investments are given above. Accordingly, except for electricity, it may be said that in 1949-1951 E.C. the investments in the directly productive and social development sectors were lagging whereas the investments in housing were much higher than foreseen in the Five-Year Plan.

The estimated distribution the monetary investments by sources of financing is shown below:

Monetary Investments by Sources of Financing in 1949 - 1951 E.C.

Million Eth.$

	1949	1950	1951 (estimat)	1949-51	Five-Year Plan 1949-53	% 5:6
1	2	3	4	5	6	7
Domestic Sources . . .	44.0	60.3	61.0	165.3	296	55.9
Budget	22.5	24.4	17.9	64.8	182	35.6
Bank Loans	6.4	9.8	11.1	27.3	44	62.0
Reinvest.of Pub.Ent.	3.8	6.4	6.7	16.9	10	169.0
Private	11.3	19.7	25.3	56.3	60	93.8
Foreign Sources . . .	13.3	18.4	20.2	51.9	198	26.2
Loans	7.5	14.2	10.7	32.4	130	24.9
Aid	2.4	2.1	5.8	10.3	13	79.2
Private	3.4	2.1	3.7	9.2	55	16.7
Reparations	-	12.0	7.7	19.7	41	48.1
TOTAL	57.3	90.7	88.9	236.9	535	44.3

As it can be seen from the above survey the essential lag in investments from the budget and foreign loans as well as foreign private capital was the main feature of the development in 1949-1951 E.C. All other domestic sources as well as foreign aid will probably considerably surpas the Five-Year Plan expectations. But the contribution of all these sources to total investments is much lower than those from budget and foreign loans. Consequently, the final position of the Five-Year Plan implementation will to the greatest extent depend on these investments.

Two main factors influenced the relatively low budgetary investments in 1949-1951 E.C. The first was the lag in the implementation of the road construction programme. According to the three-year programme for road construction and maintenance (1958-1960) agreed upon with the IBRD the contribution of Ethiopian Government budget should have amounted to Eth.$ 42 million in 1958 and 1959. Actually less than Eth.$ 20 million was spent.

The second reason for the low budgetary investment in 1949-1951 E.C. was the very low funds devoted to agriculture, mining and community development as well as relatively insufficient investments in public health and education.

The lag in foreign loans utilization is primarily due to the slow execution of the road construction programme and airports development. From about Eth.$ 100 million already secured from the IBRD and EXIM Bank only about Eth.$ 20 million was actually spent in the course of 1950 and 1951 E.C. However, one may expect that in the two remaining years a considerable part, if not all, of those funds will be used for transport development.

The construction works of the port of Assab have been developing according to the established programme. The total value of investments executed by the end of 1951 E.C. came to about Eth.$ 8.5 million, half of which being foreign funds. The bulk of the remaining about Eth.$ 17.5 million will be executed in the course of the following year.

The reparation funds for the building up of Koka Dam were spent to an amount of about Eth.$ 20 million. The remainder of Eth.$ 21 million will be used in the next two years.

The new loans under conclusion of over Eth.$ 300 million mostly for directly productive projects will in part be also invested in the course of the two remaining years of the Five-Year Plan. Hence, the general position of foreign loans utilization can be much ameliorated over the mentioned period. However, the new loans may but only partly substitute for the low import of foreign private capital.

Finally, it should be stressed that the essential and difficult problem in the remaining two years will be how to increase budgetary investments because of an unbalanced budget and considerable budgetary deficits which may be expected.

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IV. FOREIGN TRADE AND BALANCE OF PAYMENTS

Exports

The export movement over the period 1949-1951 E.C. compared to the Five-Year Plan may be seen in the following survey:

Total Export

Million Eth.$

	1949	1950	1951[2]	1952	1953
Planned Trend1)	182	193	205	216	228
Implementation	177	170	170		
Difference	-5	-23	-35		

1) In the Five-Year Plan the volume of export and import has been estimated only for the years 1957 and 1961 Greg.Cal. The trend shows in the table for 1950,1951 and 1952 E.C. has been calculated within the abovesaid limits of the Plan.

2) Estimates in this table and in the tables below are based on incomplete statistical data for 1951 E.C.

The above lag has been caused mostly by coffee and by other export groups.

Export of Coffee

Million Eth.$

	1949	1950	1951	1952	1953
Planned Trend	110	118	127	135	143
Implementation	108	109	94		
Difference	-2	-9	-33		

More than half of the mentioned lag refers to the quantitative decrease in coffee export as seen below:

Export of Coffee

Thousand tons

	1949	1950	1951	1952	1953
Planned Trend	44	48	53	55	60
Implementation	44	44	42		
Difference	-	-4	-11		
Actual Value in Million Eth.$	-	-9	-25		

Other Exports

Million Eth.$

	1949	1950	1951	1952	1953
Planned Trend	72	75	78	81	85
Implementation	69	61	76		
Difference	-3	-14	-2		

The lag was due to a slowdown in the export of oil-seeds, cereals, live cattle, hides and.chat.

In general twothirds of the total export lag was caused by insufficient coffee export and the remainder by other exports.

Imports

The trend of total import over the period 1949-1951 E.C. as compared to the Five-Year Plan may be seen in the next survey:

Total Import

Million Eth.$

	1949	1950	1951	1952	1953
Planned Trend	170	179	188	197	207
Implementation	166	194	208		
Difference	-4	+15	+20		

The above increase in imports was caused exclusively by the import of consumption goods and goods in process as seen below:

Imports of Consumption Goods and Goods in Process

Million Eth.$

	1949	1950	1951	1952	1953
Planned Trend	125	128	131	134	137
Implementation	135	144	148		
Difference	+10	+16	+17		

The considerably more rapid increase in the current import than forecast was the result of the rise in foreign prices of the mentioned products, and especially of the slower development of the domestic industry than foreseen by the Plan.

Import of Equipment

Million Eth.$

	1949	1950	1951	1952	1953
Planned Trend	45	51	57	63	70
Implementation	31	50	60		
Difference	-14	-1	+3		

When considering the lag in the import of equipment behind the planned trend one should bear in mind that the import was mostly financed from foreign sources, and was dependent on them.

It comes out of the aforesaid that the worsening of the trade balance in relation to the planned trends was due for 2/3 to the export, and for 1/3 to the import. Furthermore, in the case of export it was due for two thirds to the lesser export of coffee, while in that of import it was exclusively the consequence of an increased import of consumption goods and goods in process.

Balance of Payments

In the table below are given the planned balance of payments and actuals for two and a half years:

Balance of Payments[1]

	Total Five-Year Plan	Planned for first three years	Actuals for three years	Difference (4-3)
1	2	3	4	5
Goods and Services				
Exports	1 049	603	502	- 101
Imports	994	571	566	- 4
Trade Balance	+ 55	+32	-64	(-97)
Services	-171	-98	-49	+49
Gold Proceeds	-	-	9	+ 9
Total Balance	-116	-66	-104	-38
Capital Movement				
Private Investments . .	55	27	4	-23
Foreign Loans	130	73	43	-30
Reparations	41	25	25	-
Foreign Aid	13	6	67	+61
Contractual Repayments	-18	-11	- 8	(+3)
Errors and Omissions . .	-	-	-37	-37
Total Foreign Funds .	221	120	94	-26
Holdings	+105	+54	-10	(-64)

1) On the basis of State Bank of Ethiopia.

The decrease in holdings of foreign exchange for Eth.$ 10 million instead of the foreseen increase for Eth.$ 54 million at the end of the first three years reveals an unfavourable realisation of the balance of payments.

Effective Trade Balance

From the viewpoint of the effective trend the most important fact is that the trade balance in 1951 E.C. was largely worsened in relation to 1949 E.C. i.e., in 1959 in relation to 1957, which may be seen here below:

Trade Balance

Ethiopian Calendar

Million Eth. $

	1949	1950	1951	Difference (4-2)
1	2	3	4	5
Exports	177	170	170	- 7
Imports	166	194	208	+42
Trade Balance	+11	-24	-38	(-49)

Trade Balance

Gregorian Calendar 1)

Million Eth. $

	1949	1950	1951	Difference (4-2)
1	2	3	4	5
Exports	195	154	180	-15
Imports	178	194	210	+32
Trade Balance	+17	-40	-30	(-47)

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1) Estimates on the basis of 9 months.

V. AGRICULTURE

Development Expenditures in the course of 1949-1951 E.C.

Total public investments in agriculture during 1949-1951 E.C. amounted to Eth.$ 4 272 000 as compared with Eth.$ 10 009 000 foreseen by the Plan for the same period, or 42.7% of the Plan. Public operating expenditures during 1949-1951 E.C. totalled Eth.$ 8 684 000 or 62.5% of the Plan because the planned figure was Eth.$ 13 896 000. The above investments of Eth.$ 3 980 00 or 93.2% were financed mostly from the US Technical and Economic Assistance. The operating costs were also for the greater part financed by the US Technical Assistance: Eth.$ 5 028 000 or 57.9%. In the Plan it has been assumed that the bulk of both investment and operating costs has to be financed by the domestic budget and provided a budget of Eth.$ 9.8 million for agriculture in 1951 E.C. Actually, the budgetary expenditure on agriculture in 1951 E.C. amounted only to Eth.$ 1 336 000. Although foreign technical and economic assistance funds were substantially larger than assumed by the Plan, they could not compensate for insufficient funds allotted from the Budget for agricultural development.

Development Expenditure on Agriculture[1)]

Thousand Eth.$

	1949	1950	1951	1949-51
Investments				
Budget	27	192	73	292
Technical Assistance	1 449	936	525	2 910
Economic Assistance	-	-	1 070	1 070
TOTAL	1 476	1 128	1 668	4 272
Five-Year Plan	4 258	2 310	3 441	10 009
Operating Expenditure .				
Budget	985	1 408	1 263	3 656
Technical Assistance	1 326	1 657	2 045	5 028
TOTAL	2 311	3 065	3 308	8 684
Five-Year Plan	2 801	4 743	6 352	13 896
Total Expenditure				
Budget	1 012	1 600	1 336	3 948
Technical Assistance	2 775	2 593	2 570	7 938
Economic Assistance	-	-	1 070	1 070
TOTAL	3 787	4 193	4 976	12 956
Five-Year Plan	7 059	7 053	9 793	23 905

1)According to the date of the Ministry of Agriculture.

Research Service

In the field of agricultural research the Agricultural and Mechanical College at Harar, the Agricultural Secondary Schools and the Central Experimental Station Debra Zeit have been taking active role. A small-scale research has been done in Eritrea. Research activities included agronomy, soils and animal husbandry.

The existence of wide variations among native crops with respect to genetic and physiological characteristics offers large opportunity for the development of superior varieties crops in Ethiopia. To this end the College at Harar, the Jimma Agricultural School and the Central Experimental Station have attempted variety tests of wheat, sorghum, corn, oats, barley, soybeans, castorbeans, grasses, leguminous and several other economic crops. Native crops as well as imported varieties were under observations to select varieties which combine high yielding quality and adaptation to the enviromental conditions.

Research activities were particularly directed to specific investigations such as date of planting, fertility tests, method of planting, selection of varieties and rate of seeding experiments.

In addition to the above crops the Jimma Agricultural School has been carrying out research in the developing of coffee varieties from native and imported brands. Research in horticultural crops have been carried out in all of the three institutions.

In its fourth year of operation, the Central Experimental Station at Debra Zeit has made preliminary attempts to distribute two varieties of wheat (Kenya I and Kenya V) to the interested farmers. These wheat varieties have been also started at the College site at Alemaya.

In addition to the production of promissing wheat varieties for distribution to interested farmers, preliminary attempts are also underway both at the College and the Central Experimental Station farm to produce better varieties of sorghum, oats, barley and other economic crops.

In addition to the mentioned efforts of research in the plant sciences some collection of herbarium has also been initiated. Several hundred native plants, grasses and leguminous have been classified and identified.

Researches in soils are well in progress at the Agricultural and Mechanical College. Over 2500 soil samples have been processed at the soil laboratory of the Imperial College since 1949 E.C. The soils have been tested for their ability to furnish nutrition to plants. Investigation along this line is important to form approximate opinions about the fertility of Ethiopian soils. With anticipated increase in agricultural production, it is imperative to analyse the fertilities of representative projects, soil samples of the different regions of Ethiopia, which are characterized by wide variations in soil types.

Research in animal husbandry as in other branches is in its preliminary stage. The animal husbandry department has initiated a cattle breeding programme which attended to the breeding and selection of various strains of native Ethiopian cattle found throughout the Empire. The bases of selection and breeding were upon Merino feeding trials under proper management.

Foundation herds of cattle and sheep were started in 1949 E.C. from the better herds of the Somali cattle. The same programme was extended in 1950 E.C. with additional cattle from the Somali herds.

According to the Five-Year Plan in the field of research much remains to be done, however, in the investigation of method of crop growing by irrigation. As a substantial percentage of Ethiopian potential resources lies in the river basin of the Awash and Webe Shebelli, it is highly desirable to make necessary provisions for experimental stations to be constructed in the abovementioned sites to perform various agronomic tests. In the interest of a well-coordinated national research it is much desirable to establish local stations. This is rather urgent as the development of these river basins is foreseen for the near future.

According to the Five-Year Plan the development of nutritious pastures and pasture management should also he initiated in important livestock areas. Suitable methods of harvesting and drying hay should also be investigated to mitigate the serious problem of shortage of pasture during dry season. Investigation should also be conducted preferably in local livestock areas by cultivating crops for silage purposes to find possibilities of substituting ensilage for fresh grass during dry season.

According to the Five-Year Plan investigations should have been undertaken to discover the best applicable methods under existing conditions for household processing and storing of agricultural products.

Agronomy

Coffee Development Project - In the sector of coffee improvement superior quality seedlings have been grown and a more up-to-date coffee processing method has been introduced. In 1949 (E.C.) about 130.000 superior quality seedlings were sold at reasonable prices to farmers; in 1950 E.C. this number amounted to 250.000 and in 1951 E.C. to some 500.000.- In 1949 E.C. some 50 work units were engaged in wet coffee processing and in 1950 E.C. their number increased to 150, greatly contributing to popularization of more modern methods of coffee processing. Since the establishment of the Coffee Board this project has been under its guidance and supervision.

Farm Machinery Project - In 1949 E.C. the Agricultural Machinery Pool was adopting imported heavy machineries to Ethiopian conditions. It has continued to rent implements to farmers on a nominal basis. The Machinery Pool has found out that the adopted machineries and implements were heavy to local bullocks. The project started demonstrating to farmers some modern implements and also trained some people. In 1951 E.C. the Machinery Pool started selling tools at favourable prices to the neighbouring farmers. The tools were altered or new pieces were made to suit local conditions. In the course of 1949-1951 E.C. about 250 pieces of modern tools and implements were introduced (iron ploughs, teamed wagons and harrows).

Guder Fruit Farm - The Guder Fruit Farm in the vicinity of Ambo was reorganized to the purpose of becoming a fruit improvement centre. Within a short time this project showed a remarkable progress and one may expect it to play an important role in the promotion of fruit growing in the surrounding region.

Cotton Improvement Centre - Alamata - The Cotton Improvement Centre at Alamata discontinued its work due to poor results.

In the field of Agronomy little has been done in the organization of seed service, what is especially pointed out in the Five-Year Plan. Nor have the results in cotton improvement proved satisfactory. In order to improve cotton production the Five-Year Plan has foreseen the establishment of a special agency which should concern itself with the extention and promotion of cotton growing and with the organisation of production, preparation and marketing of cotton. This body should also control the selection and distribution of seeds.

Animal Husbandry

The Livestock Development Project encompasses both Join Fund and Economic Assistance activities.

During the 1950-1951 E.C. the following accomplishments have been achieved:

- The bull station which had been started at Shola during 1949 E.C. was completed and a Holstein bull is now servicing farmers' cows;
- A bull station was established at Akaki and bulls placed there to service farmers' cows;
- The old station at Makanissa, which was formerly maintained by the Ministry of Agriculture, was rehabilitated to serve as a bull station and bull placed there to service cows in the area.
- Sheep which were imported from the United States in 1949 E.C. and stationed at the Central Experiment Station, Debra Zeit, were partially distributed, with all of the ewes and eight rams going to Entoto to form the nucleus of a foundation flock. Ten rams were sent to the Imperial Ethiopian College of Agriculture and Mechanical Arts, Alemaya, for their sheep breeding programme.
- The Holstein-Friesian bulls imported from the United States in 1949-1950 E.C. were sent to the New Holota farm as herd to cows selected from the progeny of old UNRRA imports to form the nucleus of a foundation herd. Seventeen of these cows were bred to the bulls.
- In cooperation with the Central Experiment Station, a permanent pasture is being established and corn and other forage crops planted for silage and hay to feed cows to be selected for cross-breeding with the Hereford bull presently located at this stations.
- In the field of animal husbandry some progress was achieved in the existing livestock stations. However, nothing has been hitherto undertaken for the establishment of new selecting stations as foreseen by the Five-Year Plan: four selecting stations for the rearing of cattle-breeders, three sheep stations for merinization, and a stud farm for horses and donkeys.

In the field of merinization some progress was achieved. However, the Five-Year Plan has foreseen the undertaking of more extensive measures in order to obtain a higher yield of wool from domestic sheep.

According to the Five-Year Plan in the apiculture the attention should have been paid to the introduction of better beehives with movable honeycombs in order to increase the yield and improve the quality of both honey and wax.

Extension Service

The activities of the extension service in the course of 1949-51 E.C. were directed towards:

- Education meetings with farmers;
- Organizing of agricultural youth clubs;
- Conducting demonstration on sound management of livestock practices, field and horticulture;
- Cooperating with other departments of the Ministry in popularization of their respective recommendations to the farmers;

The following data will help to provide a general picture of works in which the Extension Service was engaged:

Extension Service

	1949	1950	1951
Extension Supervisors	2	3	3
Extension Agents	12	43	61
Field Days held	3	12	18
New Youth Clubs organized	68	9	43
Chickens distributed	-	1 538	11861
Field Crop Demonstrations	-	12	-
Adult Education meetings,held	-	102	156
Cooperation given to other agencies:			

1949	Coffee Processing	Animal Disease Control
1950	DDT Distribution	Coffee Processing
1951	Coffee Processing	

The Extension Department of the Ministry is also responsible for training the prospective extension personnel in extension methods, so that when they actually take up their position in the rural areas they may be able to do their work efficiently and adequately. Training in extension methods is given in Ethiopia, Beirut and the USA, depending upon the needs of the Ministry and efficiency of the candidates. So far, the Extension

Department has produced 61 fully trained extension workers. They have been absorbed in the Extension Department of the Ministry of Agriculture.

Till 1951 E.C. the Extension Department did not have its own offices in the Ministry of Agriculture at Addis Ababa and in the provinces. The result was overcrowding in the Ministry's offices and payment of high rents in the provinces. To meet this situation, the Extension Department started constructing its office building in the Ministry of Agriculture as well as in the provinces. So far, the central office of the Extension Department has been constructed within the premises of the Ministry of Agriculture, Addis Ababa, and provincial offices at Bishoftu, Ambo, Holleta, Harar and Debra Berhan. Construction works are in progress at Wollisso and Majite.

One of the important and essential works of the Extension Department is to teach farmers through mass media such as leaflets, bulletins, newspapers, radios, films and exhibits. The Extension Department has already started preparing and distributing farmers' leaflets in simple Amharic, showing agricultural films and exhibits on the field days and disseminating useful information through newspapers and radios.

The Extension Service has been developing modestly under the management and supervision of the College at Harar. The Five-Year Plan has foreseen a network of the Extension Service institutions: 6 Improvement Centres, 30 Agricultural Stations, 230 Male Breeder Stations, but so far its realization has not started yet. The retardation in the building up and organization of a network of institutions of the Extension Service is remarkable and serious since in the Five-Year Plan they are given central place in the agricultural improvement.

Education

Alemaya College - In 1949 E.C. the construction of one-classroom building, administration building, dormitory and five staff houses were completed at the College. During the same year the construction of a farm shop also started; campus roads were surfaced and in use, and the boundary of the school was fenced.

In 1950 E.C. the clinic, the cafeteria and five staff houses were completed, and the farm shop building was nearing completion. The feed storage and grinding building, and also the poultry building were constructed during the same year.

In 1951 E.C. the farm shop (Agricultural Engineering Building) was fully completed, and the bachelor's quarters, dormitory, classrooms and the five staff houses were nearing completion and will be in use in 1952 E.C. school year.

Jimma School - In 1949 E.C., at the Jimma Agricultural and Technical School a 6,500-gallon water tank was erected, a metal livestock building and a bull shed were constructed. The school was fenced; staff houses were decorated and one was remodeled; roads and streets were repaired.

In 1950 E.C., renovation of the Assembly Hall was completed, and a farm mechanics building was finished.

In the course of 1949-51 E.C. the agricultural education was developing intensively. The number of graduates was the following in the last three years:

Graduates from Agricultural Schools

	1949	1950	1951	Total
Graduates from Agricultural Schools				
Agricultural College, Alemaya . . .	11	17	24	52
Agricultural Technical School, Jimma.	46	46	47	139
Agricultural School, Ambo	14	21	25	60
Graduated Abroad				
Degreed people	3	1	5	9
Technicians	1	3	2	6

In the course of the past three years valuable results were achieved in the training of agricultural personnel. It is necessary to point out that the graduated agronomists should be systematically employed primarily where they could acquire adequate agricultural practice. Specialized training abroad should be granted to a bigger number of agronomists for branches which are of importance for the promotion of the country's agriculture, with cotton and oil-seeds taking first place. It is also important to pay more attention to preparation of the future agricultural teaching staff from among graduated students by selecting for each subject the most promising ones and initiating them into the systematic teaching and scientific-research work, as well as by preparing them for doctorate dissertations and scientific degrees.

Veterinary Service

As the number of livestock in Ethiopia is very big and the livestock contagious diseases widespread the Veterinary Service is of very great importance for the country's economy. In 1949 and 1950 E.C. the veterinary service counted only 8 veterinarians and in 1951 E.C. only 7. Below is given a survey of vaccinated heads:

	1949	1950	1951
Number of Heads Vaccinated against Rinderpest	2 173 774	2 466 525	2 149 887
Number of Heads Vaccinated against Contagious Bovine Pleuro-Pneumonia	153 085	308 861	277 170
Number of Heads Vaccinated against Other Diseases	-	2 665	3 066

In 1949 E.C. a training centre was established for training vaccinators for field work. About 205 vaccinators on the average, were working on the field in the course of 1949-1951 E.C.

Measures and results achieved in the past three years are modest and unsatisfactory. The present Veterinary Service is inadequate to the required protection of livestock. The Five-Year Plan has foreseen the extension of Veterinary Service by the rapid training of qualified technicians and assistants as well as by the employment of experts from abroad, where Ethiopian experts are not available. According to the Five-Year Plan a veterinary secondary school should have been established, offering a four-year course to enable its first students to graduate in 1953 E.C.

The Veterinary Service should be re-organized so as to be enabled to fight as efficiently as possible against animal diseases and make possible the export of livestock in conformity with the international veterinary regulations.

Plant Protection

Owing to the extended activities of the Ministry of Agriculture in regard to the control of other insect and plant diseases requiring a wider range of activities, a Plant Protection Division was set up with two main sections:

a) Locust and Other Insects Pest Control;

b) Plant Diseases Control.

Along with this reorganization a basic plant pest control law was proposed in April 1950 E.C. giving authority to the Ministry of Agriculture to make and enforce regulations for the protection and improvement of agricultural crops through insect and plant diseases control. Because of responsibilities of the Ministry in regard to the international quarantine obligations a quarantine section has been included in the recently organized Plant Protection Division.

The Head Office in Addis Abeba has three permanent provincial headquarters situated in Asmara, Dessie and Dire Dawa with adequate supply of personnel, transport equipment and insecticide.

Owing to the heavy locust invasions during the years 1949, 1950 and 1951 E.C. a number of campaigns were conducted in the Harar, Eritrea, Tigre and Wollo provinces.

The activity of the Plant Protection Division in the course of the last three years covered an intensive protection of endangered areas, the extension of the service both in respect of the personnel and of equipment with more up-to-date devices.

In the field of Plant Protection perceptible results were achieved and the coming period should see its extension and better equipment.

Land Settlement

In the mentioned period the following measures were taken for the settlement of unpopulated areas suitable for agricultural production:

- A preliminary agricultural study (II Ag -173) was elaborated for the Zula region near Massawa. A dam for irrigation of 6 000 - 8 000 ha. is under construction and will be finished by the end of this year.
- A preliminary agricultural programme (II Ag-247) was worked out for the settlement on irrigated surfaces in the Awash Valley (some 70 000 ha); this programme is being studied.
- In connexion with the Proclamation of His Imperial Majesty on land settlement and allocation of credits and technical assistance, a programme was elaborated (II Ag-320) and legal provisions are being prepared for the settlement on unpopulated surfaces.

The mentioned measures which are being effectuated show that the preparatory works for a large-scale and up-to-date land settlement have started in conformity with the Five-Year Plan.

It is expected according to the Five-Year Plan that by 1953 E.C. the Land Settlement Programme will have covered about 40 000 hectares of cultivable land. Extensive efforts should be made in subsequent years according to the Proclamation of His Imperial Majesty.

Regional Studies

In order to explore agricultural potentialities field explorations have been carried out and respective preliminary studies for the development of the regions concerned have been elaborated.

The following areas were explored:

- Shebelli Valley, some 450 km. long, between the settlements Ferfer and Imi.
- Awash Valley, from Koka accumulation basin to the settlement Aisaita.
- Western part of Eritrea, from Agordat to Tessenei.
- Zula region, some 50 km. south of Massawa.

The mentioned regional studies have served as basis for the promotion of the mentioned areas. In the subsequent two planned years it is necessary to organize the regional investigations of the Ghibie-Omo River, Baro River and Lake Margaretha, which are very important from the agricultural point of view.

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VI.FORESTRY

Development Expenditure in the course of 1949-1951 E.C.

In the course of the first three planned years 1949-1951 E.C. out of the amount of Eth.$ 2 342 000 as foreseen by the Plan Eth.$ 1 509 000 or about 64% was realized.

Out of Eth.$ 1 309 000 as foreseen in the Plan for investment, Eth.$ 635 000 or some 49% was utilized.

Out of the planned Eth.$ 1 033 000 for operating costs, Eth.$ 874 000 or 85% was spent.

One may conclude from the above data that the implementation of the Plan in the course of the last three years was conditioned by financial means and available experts the increase of which was parallely followed by the implementation of the Plan.

The structure of expenditure shows the realisation of investment funds lagging (49%) as compared to operating costs (85%).

All development expenditure are shown in the table below:

Development Expenditure in Forestry in 1949-1951 E.C.

Thousand Eth.$

	1949	1950	1951	1949-51	Plan 1949-51
Investments	-	207	428	635	1 309
Budget	-	116	40	156	...
Economic Assistance .	-	91	388	479	...
Operating Costs	93	319	462	874	1 033
Budget	93	319	462	874	...
Economic Assistance .	-	-	-	-	...
Total Expenditure	93	526	890	1 509	2 342
Budget	93	435	502	1 030	...
Economic Assistance .	-	91	388	479	...

General Outline

The main tasks in the field of forestry as foreseen in the Five-Year Plan are:

- to draw up systematic forest inventories;
- to speed up afforestation and to plant new forests;
- to expand the network of nurseries for forest seedlings;
- to establish institutions as well as to organize a field service for the promotion of forestry;
- to undertake research and to devote special attention to the training of forest personnel.

In 1949-1951 E.C. the following results were achieved in the implementation of the abovementioned essential Five-Year Plan tasks:

Flights of about 12 000 km. were carried out, aerial reconnaissance of forests implemented and their location, general composition and area as far as the order of magnitude goes was ascertained. An archive consisting of about 13 000 aerial photographs was established and computing machines for maps preparation and photographs evaluation provided.

The production of seedlings was substantially increased. In 1957 about 1.3 million seedlings were produced, in 1958 about 1.3 million and in 1959 about 8 million. The seedlings were used to afforest the Government land and they were also largely distributed to private landowners. Until August 1959 the afforestation was largely carried out in the Koka watershed area of Shoa Province.

The forest conservatorship in Shoa Province has been organized and commenced practical work.

A draft for Regulations concerning forest reservation was prepared. Forest demonstration with the use of aerial mosaics was prepared as a methodological experiment for the forests: Din-Din, Cuni Muhtar, Shashemanne and Managasha. A proper detailed demarcation was carried out in Managasha and prepared in Wofwasha and in Jam-Jam forests.

The building up of the Forest Research Institute in the compound of the University College in Addis Abeba is nearly completed. The scientific equipment has been secured.

The nursery in Managasha model forest was organized as an experimental nursery and 26 exotic species were sown up by the end of August, 1959. They are Fraximus Augustifolia, Cupressus Lusitanica, Pinus Halepensis, Pinus Radiata, Eucalyptus Viminalis, E.Sideroxylon, E.Rubida, E.Maculata, Robinia Pseudoacacia, Acacia Molissima, Pinus Pinea, Pinus Nordmann, Pinus Calabrica, Pinus Sabiniana, Pinus Europaea, Pinus Silvestries, Pinus Excelsa, Mimusa Tulibrisilhia, Asparagus Falcatus, Ficus Elastica, Grevillea Robusta.

Among native species the following have been introduced in forest and the nursery: Tidh (Juniperus Procera), Zigba (Pedocarpus Gracilor) Omedla, Kosso (Hagenia Authelminthica).

A Forest School for training forestry in two years and rangers in a four-year course was founded in Ambo and the first trained foresters turned out in July 1959. Four teacher houses, a dormitory and classrooms were constructed and training equipment therefor has been secured. A practical training center to complement the theoretical training was established in the National Park Managasha. Modern fire watch-towers were erected. Four meteorological field stations are being prepared to be set up in different altitudes of the Park and the equipment has been completely provided. The existing saw-mill is being reconstructed and repaired to serve primarily as a practical training institution. The forest headquarters was completed and is already occupied by a ranger forest officer.

The nucleus of a Forest Museum was set up in the big hall of the Forestry Department which will serve for information of the public and for demonstration purposes for schools and forestry students.

A forestry school at a college level is in preparation at the University College in Addis Abeba.

A draft for Regulations serving wild life protection and Hunting Laws is prepared and after amendments by legal advisors will be ready to be submitted for approval of the competent authorities.

The first "game counting", as a basis for systematic game protection was carried out in the province of Sidamo-Borana.

A project to manufacture pulp and paper of home-grown Eucalyptus was technically and commercially prepared so that now the Imperial Government has started the final negotiations for implementation of the project.

A forest department has been organized and brought in working condition. A new department building has been established and departmental offices started work therein.

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VII. MINING

Development in mining has not been carried out to a sufficient extent in 1949 and 1950 E.C. in spite of modest tasks envisaged by the Five-Year Plan. The two main tasks envisaged in the Plan have been the intensive exploration of new areas and modernisation of equipment in the existing mines.

The exploration was carried out only by foreign capital represented by the firms Sinclair Oil, Co. and Texas Africa Co. Expenditures invested by these foreign firms were about Eth.$ 10 million. Modernisation of equipment in the existing mines was not carried out.

However, in 1951 E.C. remarkable expansion of development activity in mining took place. During that year the following measures were undertaken:

- Oil-research and exploitation contract with a German firm;
- Oil-research contract with a Yugoslav prospecting firm;
- Preparations for systematic exploratory work in Adola;
- Purchase of some new but insufficient equipment;
- Education of skilled manpower for mining in the Mining School.

The budgetary investments in mining during 1949 and 1950 E.C. reached about Eth.$ 163 000.-, whilst in 1951 these investments increased to the amount of Eth.$ 1 190 000 approximately. The largest part of these amounts in 1951 E.C. was paid for oil exploration. The total budgetary investments envisaged by the Five-Year Plan come to Eth.$ 5 600 000. In the period 1949-1951 E.C. the total budgetary investments amounted approximately to Eth.$ 1 353 000, i.e. 24.2% of planned figure.

A detailed table on budgetary investments in mining is given below:

Budgetary Investments in Mining

Thousand Eth.$

	1949	1950	1951	Total 1949/51
Equipment for Adola Gold Mines	22	85	192	299
Petroleum Explorations	-	11	986	997
Other Exploration Wroks (Uranium, Geochemical Prospecting for Cooper, Coal Mine, Akobo Gold Mine)	44	1	12	57
TOTAL:	66	97	1 190	1 353

The output of gold mines reached and largely overpassed the planned output as shown in the following table. On the other hand, the output of platinum was lagging far behind the Plan:

Gold and Platinum Production

kgs.

	Total Gold Production 1)	Total Platinum Production
1948	715 1)	7.6
1949	682 1)	7.7
1950	850 1)	5.6
1951	1 390 1)	(8.0)
1953 Plan	932	140

1) Exclusive of production of some mines in Eritrea on which data are not available.

The Five-Year Plan has envisaged for the year 1953 E.C. the total production of existing mines to reach 932 kg. of gold and 140 kg. of platinum, partly as a result of the new equipment supplied to the existing mines.

During 1950 E.C. and particularly in the last year a considerable increase in the production of gold was achieved in Adola Mine. The gold production by mines in the course of the last years is shown below:

Gold Production by Mines

kgs.

	Adola	Akobo	Ugaro	Other Mines	Total Gold Production
1948	583	32	100	...	715
1949	544	12	125	...	681
1950	742	5	(103)	...	850
1951	1 283	6	(105)	...	1 394
1953 Plan	700	32	100	100	932

VII. ELECTRICITY

In the sector of electricity the past three-year period was characterized by significant efforts made to erect new facilities for covering the rising demand for electric power. Total investment expenditures on electricity production and distribution in the years 1949,1950 and 1951 E.C.were as follows:

Investments in Electricity in 1949-1951 E.C.

	Million Eth.$
12 Provinces (E.E.& P.A.). .	5 460
Eritrea	1 850
Koka Plant and Network . . .	19 890
TOTAL:	27 200

The Five-Year Plan has foreseen total investments in electricity of Eth.$ 43 300 000 or for the first three years an equivalent of approximately Eth.$ 26 000 000.- Accordingly, the realized investments exceeded the planned amounts.

The mentioned funds were utilized for the erection of new production,transmission and distribution facilities of which, however, only a part has been put in operation up to now. The remainder will follow in a short time for the inauguration is made impossible until the last parts get assembled and tested,though the bulk of works had been already carried out.

The new production capacities put in operation were the following:

New Capacities in Electricity

	kW
Power plants of E.E.L.& P.A..	8 215
Power plants in Eritrea . . .	4 000
Industrial power plants,about	2 000
TOTAL:	14 215

In a few months the Koka hydro-power plant which is nearing its completion will start operation. This will increase the capacity for some further 43 200 kW and bring thereby the total increase to 57 415 kW in which the public plants will participate with about 55 415 kW. Including the old capacities available at the beginning of the Five-Year Plan, the total power of public plants will reach about 81 700 kW as compared to the Plan's forecasts of only 67 000 kW for the year 1953 E.C.

Other facilities which started operation in 12 provinces from 1949-1951 E.C. were:

- Transformers 9 055 kilo-Volt Amperes (excl. Koka transmission system)
- 45 km. transmission lines of 45 000 Volt;
- 94 " " " " 15 000 " ;
- 24 " low tension main distribution lines.

The highest tension line Koka-Addis Abeba of 132 000 Volt and at a lenght of 85 km. as foreseen by the Plan is completed and ready for operation. The other 132 000 Volt line Koka-Dire Dawa 355 km. foreseen as well, is under construction with the major part of works already carried out.

No information is available on the hydro-electric power plant Dorfu of which the construction was envisaged in Eritrea. Preliminary drawings are being prepared for the hydro-power plant Bahar Dar of some 6 000 kW which has not been foreseen in the Plan but was rendered indispensable after the decision had been taken to locate the new textile factory in Bahar Dar.

Supplying with electric power has been considerably improved in recent years. Shortages of electricity, representing serious obstacles three years ago, now are eliminated and interruptions reduced, but the variable voltage is still a trouble requesting improvement. All sources producing electric power showed the following development:

Electric Power Production in 1948 - 1951 E.C.

Million kWh.

		Public Plants	Industrial Plants	Total Production
1948	TOTAL	52.4	14.1	66.5
	12 Provinces	32.9	14.1	47.0
	Eritrea	19.5	-	19.5
1949	TOTAL	58.1	15.1	73.2
	12 Provinces	36.9	15.1	2.0
	Eritrea	21.2	-	21.2
1950	TOTAL	63.1	16.0	79.1
	12 Provinces	40.7	16.0	56.7
	Eritrea	22.4	-	22.4
1951 1)	TOTAL	69.7	16.0	85.7
	12 Provinces	46.7	16.0	62.7
	Eritrea	23.0	16.0	23.0

1) The figures for 1951 E.C. have been estimated according to data on 10 month production.

The Five-Year Plan has forecast the consumption of electric power to come to 90 million kWh by 1953 E.C. The development of power plants capacities as well as of the transmission, transformers and distribution facilities has been conformed to this target. Consequently, the above target of the Five-Year Plan will be probably reached or even surpassed, this depending not upon the supply capacities but rather upon the effective demand for electric power.

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IX. MANUFACTURING INDUSTRY

Output

General Outline -In 1950 E.C. the gross output attained Eth.$ 83.3 million representing 47.5% of the planned figures for 1953 E.C., i.e. the last planned year.

In the first two years (1949 and 1950 E.C.) the gross output showed a tendency of increase, higher in the former than in the latter year, however. In comparison with the year 1948 E.C. the index of production volume came to 112 in 1949 E.C. and to 115 in 1950 E.C. The increase was not the result of construction of new capacities but of a fuller utilization and some extension of available establishments. Despite the absence of complete data for the third planned year (1951 E.C.), one may conclude on the basis of some partial information that this year will also show a similar tendency of a slow rise in production. In 1951 E.C. some industrial capacities were built up and they will start operation in 1952 E.C.

The following table shows the movement of gross output of the manufacturing industry by branches in the course of the past three years as compared with the last planned year:

Gross Output of Manufacturing Industry 1)

Million Eth.$

	Plan 1953	1948	1949	1950	Difference 5-2
1	2	3	4	5	6
Food Process.& Beverages . . .	73.4	39.7	40.8	43.6	-29.8
Tobacco	2.0	3.3	3.7	4.1	+ 2.1
Textiles	34.6	14.6	24.9	21.2	-13.4
Leather and Footwear	13.7	2.2	3.1	3.4	-10.3
Chemicals	9.6	2.1	1.9	2.0	- 7.6
Timber and Building Material .	9.9	7.0	4.8	5.7	- 4.2
Metals	22.9	0.3	0.3	0.2	-22.7
Printing	5.5	1.9	1.9	2.0	-3.5
Others	3.9	1.4	1.7	1.1	-2.8
TOTAL:	175.5	72.5	83.1	83.3	-92.2

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1) The data are based on the census of industrial production of the Ministry of Commerce and Industry.

The comparison of outputs by branches (1950 E.C. as against the Plan for 1953 E.C.) shows the tobacco industry exceeding the Plan for Eth.$ 2.1 million while, the items "food processing and beverages" showed a good progress in the implementation of the Plan. Other branches showed a slight progress, whereas metal industry even stagnated because the planned capacities for these branches have not been constructed yet.

The above-presented table also shows a constant increase in the value of output, particularly in food processing, tobacco, textiles and leather industry, while in other branches, despite the rise in the output of some particular goods, there was a stagnation or slight decrease.

A similar tendency of increase was shown in the indices of the output volume of some branches of the manufacturing industry:

Production Indices of the Manufacturing Industry

1948 = 100

	1948	1949	1950
Food Processing	100	121	129
Beverages and Tobacco	100	103	109
Textiles	100	107	108
Leather and Footwear	100	91	98
Timber and Building Material			
Others			
TOTAL	100	112	115

A slight increasing tendency was seen in manpower in the manufacturing industry as shown in the table below:

Manpower in Manufacturing Industry

Thousands

	Workers and Employees	Index 1948=100
1948	19.4	100
1949	21.4	110
1950	21.9	113
1953 (Plan) . .	28.0	144

Food Processing & Beverages - This most important branch of manufacturing industry with Eth.$ 43.6 million of gross output in 1950 E.C. represents more than half of the total gross output, and some Eth.$ 30 million are still to be realized in next three years in order to attain the planned output for 1953 E.C.

The most favourable trend was shown by sugar production which increased from 16.2 thousand tons in 1948 E.C. to 32.5 thousand tons in 1950 E.C. and was estimated to reach about 36 thousand tons in 1951 E.C. Though the import of sugar has been reduced to the minimum (some 1,500 t. in 1951 E.C.) a new sugar plant has been envisaged to be constructed in the vicinity of the sugar plant at Wonji, and of similar capacity, since an increased consumption of sugar has been foreseen in the coming years due to the expansion of the market.

In the course of the last two years flour production showed a slight decrease though the new Behesnilian Flourmill at Bishoftu started operation in 1949 E.C., partly due to unfavourable grain production. As a new mill was constructed at Quiha and large flourmill capacities are available one may foresee an increased flour production in 1952 E.C. In 1950 E.C. 18 000 tons of flour was produced as against 30 000 tons planned for 1953 E.C.

The meat production was constantly increasing in the course of the last years. The production in Eritrea reached 3.1 thousand tons in 1950 E.C. The new slaughterhouse in Akaki started production in 1948 E.C. and in 1950 E.C. were slaughtered 44.6 thousand heads of cattle, 40.3 thousand of sheep and 11.o thousand of goats, representing some 7 000 tons of meat. The planned production of 25 000 tons of meat (for 1953 E.C.) will be attained after the foreseen two new slaughterhouses have been built up in the course of the next two years.

The oil production decreased in the last years due to an expanded export of oil-seeds and only partial utilization of available capacities. In 1950 E.C. the oil production came to 4.2 thousand tons only as compared to the planned 6 000 tons to be attained with the existing capacities.

The beer production with 51 000 hl in 1950 E.C. overpassed the planned production for 1953 E.C. of 38 000 hl. The wine and liquor production as well as the mineral water production showed a constant slight increase. The capacities for these beverages were expanded lately.

Tobacco - The planned tobacco gross output value of Eth.$ 2.o million for 1953 E.C. was overpassed in 1949 E.C. and in 1950 E.C. attained Eth.$ 4.1 million. The production of cigarettes rose from 242 million in 1948 E.C. to about 320 million (estimates) in 1951 E.C. i.e. by some 32%,

Textiles - The gross output of textiles was Eth.$ 21.2 million in 1950 E.C., in order to attain the planned gross output for 1953 E.C. still Eth.$ 13.4 million should be realized. The constant increase in production is due to the enlargement of existing textile plants and particularly to the start of operation of new textile plant in Asmara (Cotonificio Barattolo, Co.).

The table below shows the movement of production and import of cotton yarn and cotton cloth in the course of the last years; the increased production reduced the import of both articles:

Cotton Yarn and Cotton Cloth Production and Import

	Unit	Plan 1953	1948	1949	1950	1951
Cotton Yarn						
Production . .	th.tons	6.5	2.3	3.5	3.2	(3.5)
Import	"	-	2.6	1.o	1.o	...
Cotton Cloth(Abudjedid and Drills)						
Production , ; ; ,	Milion sq.m.	21.5	4.8	5.3	5.8	...
Import	"	-	14.5	12.7	11.3	...

The capacity of textile plants is now increased due to the new Indo-Ethiopian Textile Mill at Akaki, and due to the enlargement of existing textile plants.

The output of cotton blankets and sacks showed a slight increase too, but to reach the Plan the existing capacities should be extended.

Leather and Footwear-In the last three years the gross output of this branch was slowly increasing and reached in 1950 E.C. 3.4 million Eth.$. By the end of the planned period Eth.$ 10.3 million more should still be realized.

The production of sole and all kinds of leather increased from 565 tons in 1949 E.C. to only 587 tons in 1950 E.C.(2 150 tons planned for 1953 E.C.)

The production of leather shoes increased in the same period from 200 to 239 thousand pairs (Plan for 1953 E.C.is 300 thousand pairs).However, the import of shoes didnot show any remarkable change in the course of the last years:

Import of Leather Shoes

	Thousand pairs
1948	1 120
1949	1 411
1950	887
1951	(1 000)

Timber and Building Material - The gross output value of this branch of Eth.$ 5.7 million represepresents about 58% of the planned gross output for 1953 E.C.

The timber production increased from 11 to 13 thousand c.m. in 1950 E.C. and overpassed the planned targets for 1953 E.C. for some 1 000 c.m.

The cement production with its 31.7 thousand tons in 1950 E.C. overpassed the Plan for 1953 E.C. for 1.7 thousand tons. Despite such an inecreased production the import of cement was constantly rising:

Import of Cement

	Thousand tons
1948	8.2
1949	9.3
1950	13.5
1951	(25.o)

The bricks production in 12 provinces increased from 3.7 million in 1948 E.C. to 5.5 million pieces in 1950 E.C. The bricks production in Eritrea was estimated at some 2 million pieces. The existing capacities are inadequate to realize the planned production of 12.5 million pieces in 1953 E.C.

Other Branches - Other branches of manufacturing industry, e.g. chemicals, metals, printing, etc. with a gross output value of Eth.$ 5.3 million or 6.4% of total gross output in 1950 E.C. showed a stagnation and even some slight decrease in production in the course of the last years

(these branches have been planned to attain some 24% of total gross output in 1953 E.C.). New capacities were not constructed or the existing extended as foreseen in the Plan for these industrial branches, except of some enlargement in printing.

Investments

General Outline -. Over the period 1949-1951 E.C. Eth.$ 24.6 million or 43.1% of the total forecasted in the Five-Year Plan was invested in the manufacturing industry.(It should be mentioned that capital expenditure in 1949 and 1950 E.C. represented the gross capital expenditure, whereas the estimated capital expenditure in 1951 E.C. was in general new investment. Hence, the comparison of these investments with those foreseen in the Plan for manufacturing industry is incomplete since the Plan includes mostly new investments).

In 1948 E.C. capital expenditure amounted to Eth.$ 7.6 million, in 1949 Eth.$ 5 million, in 1950 Eth.$ 6 million, and in 1951 E.C. Eth.$ 13.6 million. In 1948 E.C. the investments were high due to big capital expenditure on Sugar Plant at Wonji and on Cotonificio Barattolo & Co., in Asmara. Capital expenditure decreased in 1949 and 1950 E.C. but in 1951 E. C. they were more than doubled as against 1950 E.C. The breakdown of investments by type in the recent years was the following:

Capital Expenditure on Manufacturing Industry by Type in 1948-1950 E.C.

Million Eth.$

	Plant and Machinery	Vehicles	Land and Building	Total
1948	4.3	0.3	3.0	7.6
1949	3.7	0.1	1.2	5.0
1950	2.7	0.4	3.0	6.0

As seen above, the value of machinery in 1948 and 1949 E.C. was much higher that that of building costs while in 1950 E.C. this item was higher due to the construction costs of the new Indo-Ethiopian Cotton Plant at Akaki.

The next table represents a survey of capital expenditures by branches in comparison with the Five-Year Plan:

Capital Expenditures on Manufacturing Industry by Branches in 1948-1951 E.C.[1)]

Million Eth.$

	Plan 1949-53	1948	1949	1950	1951	Total 1949-51	% 7:2
1	2	3	4	5	6	7	8
Food Proces.& Beverages	19.5	4.7	3.9	2.4	3.o	9.3	47.7
Tobacco	0.5	0.2	0	0.1	0.2	0.3	60.o
Textiles	20.3	1.9	0.3	2.4	9.o	11.7	57.6
Leather and Footwear . .	2.5	0.3	0.1	0.1	0.5	0.7	28.o
Timber & Building Mater.	2.9	0.3	0.2	0.2	0.1	0.5	17.2
Printing	1.5	0.1	0.1	0.1	0.4	0.6	40.o
Others	9.9	0.1	0.4	0.7	0.4	1.5	15.2
TOTAL	57.1	7.6	5.o	6.o	13.6	24.6	43.1

1) The data for 1948-1950 E.C. are taken from the census of industrial production of the Ministry of Commerce and Industry; for 1951 E.C. they refer mostly to the returns of the same Ministry, to the information of the Development Bank of Ethiopia as well as to some other sources. The 1951 E.C. figures represent rough estimates.

As seen in the above table the largest portion was invested in the textile industry: Eth.$ 11.7 million or over 57% of investments planned for this branch. Eth.$ 9.3 million or over 47% of the Plan's forecasts went to "food processing and beverages"."Printing"absorbed Eth.$ 600 000 or 40% of the planned amount; "Leather and footwear" absorbed Eth.$ 700 000 or 28% of the planned amount. The negligible investments went to "chemicals"(Plan Eth.$ 2.7 million) and "metals" (Plan Eth.$ 1.7 million).

Out of total investments the largest portion is represented by domestic private investments, then foreign private investments and,finally,bank loans. According to data furnished by the Development Bank of Ethiopia the industrial loans were granted in the following amounts:

Industrial Loans Granted by Development Bank of Ethiopia

	Million Eth. $
1948	0.9
1949	0.6
1950	0.4
1951	1.1

Some investments had their source in public enterprises funds and some in foreign loans (Cotonificio Barattolo Plant was granted Eth.$ 1 250 000 by the Development Loan Fund).

Investments in Some Industrial Plants - A detailed analysis of investments (enlargements and new investments) in the course of the last three years shows that they were invested in the following industrial plants (investments exceeding Eth.$ 50 000):

Investments in Some Industrial Plants

	Thousand Eth.$
1949 E.C.	
Total Capital Expenditure	5 000
Food and Beverages	
Sugar Plant, Wonji	2 039
Ethiopian Slaughterhouse, Akaki	480
INCODE (meat plant), Asmara	147
Zecou Oil and Soap Factory, Harar	247
St. Georges Brewery	360
Textiles	
Cotton Factory, Dire Dawa	175
Cotonificie Barattolo Co., Asmara	64
Leather and Footwear	
Mardiros Darakian Plant, Addis Abeba	77
Timber and Building Material	
Mosvold Woodworks, Addis Abeba	150

(Continued)

	Thousand Eth.$
Printing Press	
Commercial Printing Press	75
Others	
Societa Anonima Vetro (bottle plant), Asmara . . .	225
1950 E.C.	
Total Capital Expenditure.	6 000
Food and Beverages	
Sugar Plant, Wonji	881
A.Michos Flourmill, Addis Ababa	100
Cerealia Co.,Addis Ababa	54
E.C.C.E. Centrale de latte, Asmara	75
Mecanissa Alcohol Distillery, Addis Ababa . . .	803
St.Georges Brewery, Addis Ababa	113
Textiles	
Cotton Factory,Dire Dawa	195
Diabacco Cotton Comp., Addis Ababa	127
Papassinos Plant (gunny bags), Addis Ababa . .	550
Indo-Ethiopian Cotton Co.,Akaki	1 500
Leather and Footwear	
Mardiros Darakian Plant,Addis Ababa	79
Timber and Building Material	
Cement Factory,Dire Dawa	101
Ethiopian Woodworks, Addis Ababa	52
Printing	
Artistic Printing Press, Addis Ababa	60
Others	
Societa Anonima Vetro, Asmara	493
Francesco Magnotti (nail factory),Asmara . . .	261

(Continued)

	Thousand Eth.$
1951 E.C. (estimated figures)	13 600
Food Processing and Beverages	
Sugar Plant, Wonji	700
EFCO Ethiopian Comp.,(meat plant),Asmara .	320
Flourmill Quiha	300
Nefami (flourmill,macaroni), Nazareth . .	390
The Anglo-Italian Meat Company,Asmara . .	200
Saline di Massawa	100
Alcohol Factory, Alem Guena	200
Tobacco	
Tobacco Factory,,Addis Ababa	200
Textiles	
Cotton Factory, Dire Dawa	4 600
Diabacco Cotton Co., Addis Ababa	340
Cotonificio Barattolo Co., Asmara	500
Indo-Ethiopian Cotton Co.,Akaki	3 500
Leather and Footwear	
Asco, Shoes Factory, Addis Ababa	370
Mardiros Darakian Plant, Addis Ababa . . .	70
Timber and Building Material	
Cement Factory, Dire Dawa	60
Printing Press	
. Berhannena Selam Printing Press, Addis Ababa	250
Ethiopian Printing Press, Addis Ababa. . . .	120

Conclusions - Investments in manufacturing industry were small in the first two planned years and only in 1951 E.C. showed some increase. The new textile plant, shoe factory, extension of tobacco factory, bottle factory, printing press, etc. are in line with the Five-Year Plan in which some 30 new industrial establishments have been foreseen for the planned period.

Recently the construction of several industrial establishments has been negotiated on the basis of foreign loans mostly foreseen in the Five-Year Plan (about 15 new industrial plants are under consideration).

As shown in preliminary studies and estimates the investments for negotiated establishments will come to Eth.$ 100-110 million. If contracts on their construction are realized in time one may expect them completed within the next 3-4 years, i.e. by the end of 1954 or 1955 E.C. The output of these prospect establishments can be estimated at a value of Eth.$ 120-130 million, which more or less corresponds to the figures as foreseen in the Five-Year Plan of Eth.$ 175 million for 1953 E.C. and Eth.$ 218 million for 1954 E.C. It means that after the mentioned new industrial capacities start operation in 1954 or 1955 E.C. as expected, the total gross output of industrial production will attain about Eth.$ 200-250 million. The Plan will be implemented with approximately a one-year delay but there is some possibility both the planned investments and the gross output of manufacturing industry to be exceeded.

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X. TRANSPORT AND COMMUNICATIONS

Road Construction and Maintenance

The following is based partly on the official Imperial Highway Authority (IHA) data and in part on the data from the budget. Since the IHA shifted the fiscal year from February 28, to September 10, starting from the year 1957, the complete data for the year 1949 E.C. were not available and instead data were furnished by the IHA for the period from March 1956 (1948 E.C.) to February 1957 (1949 E.C.).

According to the statements of the IHA representatives there is no difference in expenditure between the 6 months in 1957 (from February to September) and the period from September 1956 to February 1957.

Development Expenditure - The total investment costs in the years 1949-51 E.C. spent on roads were the following:

Total Investments by Years

	Thousand Eth.$
1949	9 167
1950	13 315
1951	11 503
TOTAL	33 985

These investments were spent on road maintenance as follows:

Investments in Road Maintenance

	Thousand Eth.$
1949	5 448
1950	6 307
1951	9 494
TOTAL	21 249

or 63% of the total investment costs.

On construction, reconstruction, ground and aerial surveys were spent:

Investments in Road Construction

	Thousand Eth.$
1949	3 719
1950	7 008
1951	2 009
TOTAL	12 736

or 37% of the total investment costs.

Investment costs by sources are visible from the following figures:

Investment Costs by Sources by Years 1949 - 1951 E.C.

Thousand Eth.$

	IBRD	Budget
1949	-	9 167
1950	759	12 556
1951	5 003	6 500
TOTAL	5 762	28 223

In the Five-Year Plan (Chapter 15) Eth.$ 120 million has been foreseen for road construction and maintenance. About 50% of the amount has been allotted for road construction and 50% for road maintenance. Accordingly, the average yearly expenditures foreseen for road construction were Eth.$ 12 million and so were for road maintenance.

Below are the total investments foreseen in the Five-Year Plan for the period 1949-1951 E.C.

Total Investments

	Thousand Eth.$
Maintenance	36 000
Construction	36 000
TOTAL	72 000

A comparison of these figures with actual investments shows that in the sector of maintenance the investments were realized by 59%, and in the sector of construction by 35%, or by 47% on the whole.

Comparison by sources:

Investment Costs by Sources
1949 - 1951 E.C.

Thousand Eth.$

	IBRD	Budget
Five-Year Plan	60 000	60 000
Actuals	5 762	28 223

Accordingly, the investments from the IBRD loan were realized by 10% and from the budget by 47%.

Realization of the Development Projects - In the Five-Year Plan a further development of the existing road network has been anticipated. The main communications as foreseen are: from Jimma to Gore and Bonga; Blue Nile-Bahr Dar; Awash-Harar, Sabatta-Gidole, Asella-Ghimir and Lekemt-Kurmuk.

In the period 1949-1951 E.C. the main works on construction and reconstruction consisted in betterment and reconstruction projects on the existing roads: Addis Ababa-Lekemt, Mojo-Dilla, and Addis Ab ba-Blue Nile.

The roads foreseen in the Five-Year Plan for construction have partly been anticipated in the IHA Programme 2, and in part the IHA Programme 3.

Implementation of Other Targets and Forecasts of the Five-Year Plan- The main targets of the Five-Year Plan in the sector of road construction and maintenance are the following: the construction of the proposed road network, organization of the maintenance and technical and economical studies of road construction and maintenance.

In the period 1949-1951 E.C. the maintenance service was extended from 6 on 8 districts and the organization of every district was strengthened and mechanization completed.

In the routine maintenance service some bigger betterment projects were included.

According to available information the studies on road network, on transportation costs and traffic surveys were accomplished, but no studies on better maintenance service, cheaper road construction and maintenance were started.

General Appraisal -In the sector of road construction and maintenance the Five-Year Plan was implemented by 47% during this period. If we compare the approved budget (IBRD loans and domestic budget) with the actuals, we come to the following picture:

Investments on Road Construction and Maintenance

Thousand Eth.$

	Annual Average of the Five-Year Plan	Approved	Actuals
1949	24 000	8 457	9 167
1950	24 000	18 513	13 315
1951	24 000	24 435	11 503
TOTAL	72 000	51 405	33 985

It is obvious that the available funds amount to 71% of the investments foreseen in the Five-Year Plan, while the actuals are considerably lower (47%).

Motor Vehicles and City Traffic

Motor Vehicles - The above title comprises the interurban freight and passenger traffic as well as urban passenger traffic i.e. the investment in trucks and lorries as well as busses and pickups, exlusive of passenger cars.

The Five-Year Plan has foreseen the following investment dynamics:

Imported Motor Vehicles

Million Eth.$

	1949	1950	Total
The Five-Year Plan	2.5	3.5	6.0
Trucks	2.0	3.0	5.0
Busses & Pickups for City Traffic . . .	0.5	0.5	1.0
Imported Motor Vehicles	3.4	7.3	10.7
Trucks	2.2	6.5	8.7
Busses & Pickups for City Traffic . . .	1.2	0.8	2.0

It may be concluded from the above table that the recent investments have been in accordance with the Plan and even considerably exceeded the foreseen level.

Taking into account the total import value of motor vehicles it can be seen that a considerable amount (56%) was spent on the purchase of passenger cars over 1947-1950 E.C. This percentage showed an incresing trend in

1947 E.C. (51,6%) and in 1949 E.C. (65,5%), while in 1950 E.C. it dropped sharply to 49,5% because of a considerable increase in the import of trucks.

Despite this increased import of trucks, it seems that the present import of trucks is insufficient to meet the needs of substitution for obsolete vehicles as well as the rising demand for transportation.

City Traffic - Streets - The Five-Year Plan has foreseen that some Eth.$ 6 million should be invested for the improvement and modernisation of the street network in Addis Ababa. This investment has been envisaged to follow the increasing volume of traffic due to the rising number of in-town circulating motor vehicles.

The dynamics of the first two years was the following:

Investments in City Traffic

Million Eth.$

	1949	1950	Total
Dynamics of the Five-Year Plan	1.o	1.o	2.o
Actually Invested	0.o5	2.o6	2.11

It could be seen from the above figures that the forecasts of the Five-Year Plan during the 1949-1950 E.C. were on the whole reached.

Railway

Although the Five-Year Plan has not foreseen the construction of new railway lines it has been suggested to undertake the necessary studies in order to elaborate a railway-development programme for the near future i.e. for the next five-year plan. Besides, the Five-Year Plan has foreseen that during the planned period "the transport facilities should be modernized and reorganized so as to reduce road haulage and railway freight charges. In regard to the railways the amount of Eth.$ 9 million was foreseen for maintenance and betterment of the existing railways (incl. rolling stock).

Actual investments lagged behind the dynamics of the Five-Year Plan, as it may be seen from the following figures:

Investments in Railway[1]

Million Eth.$

	1949	1950	Total
Dynamics of the Five-Year Plan	1.o	1.o	2.o
Actual Investments	0.4	1.2	1.6
Addis Abeba - Jibuti	0.3	0.5	0.8
Agordat - Massawa	0.1	0.7	0.8

[1] Data for 1951 E.C.are not available.

During the last two years the traffic on both lines was stagnating and even a downward tendency could be noticed. The demand for transportation services turned in favour of road transport which is successfully competing against the railway.

Aviation

In the Five-Year Plan it was foreseen that for development and modernization of air-transport Eth.$ 47.5 million should be invested out of which Eth.$ 15.5 million for building and maintenance of airports and Eth.$ 32.o million for purchasing of aircrafts and flight and other equipment. But,it has also been foreseen that the whole amount to be invested should be financed from foreign loans.

Thanks to the signed foreign loan from the EXIM Bank at an amount of Eth.$ 60 million one may expect that the Five-Year Plan will be not only implemented but overpassed. The loan should be used both for modernizing the fleet as well as for building and modernizing the airports.

Air Transport (EAL)- The air transport is covered by the air transport enterprise "Ethiopian Airlines". As mentioned above ,according to the Five-Year Plan the whole investment fund should have been provided from abroad. For this enterprise a considerable amount was spent from its own revenue (Eth.$ 5.8 million). In 1958 three new modern aircraft DC-6B were purchased and an engine overhauling shop was established to enable the enterprise to handle all engine overhaul requirements with a considerable reduction of costs.

The table below shows the comparison between the dynamics of investment by the Five-Year Plan and the actual investments during the years concerned:

Investments in Aviation

Thousand Eth.$

	1949	1950	1951	Total
Dynamics of the Five-Year Plan . .	1 000	5 000	8 000	14 000
Actual Investments	1 682	14 546	2 005	18 233
By Type of Equipment				
Aircraft and Flight Equipment .	1 159	13 734	1 500	16 393
Other Equipment	483	778	500	1 761
Miscellaneous	40	34	5	79
By Source of Financing				
Financing from Own Revenue . . .	1 682	2 179	2 005	5 866
Foreign Loans	-	12 367	-	12 367

This shows that more than 57% of the Plan has been implemented up to now.

Airports (Civil Aviation Department) - As regards the airports one may say that despite the abovementioned foreign loan the building up and modernisation of airports were lagging behind the Five-Year Plan. The entire amount spent up to now from the foreign loan covered the preparation of the "Preliminary Report" on the development of civil airports (Eth.$ 480.000).

A comparison of the dynamics of the Five-Year Plan with the actual investments spent in the past three years shows a difference of about Eth.$ 3 million:

Investments in Airports

Million Eth.$

	1949	1950	1951	Total
Dynamics of the Five-Year Plan	1.0	2.5	4.0	7.5
Actual Investments	3.1	0.4	0.9	4.4
By Type				
Airports - New Construction	3.0	-	-	3.0
- Maintenance	-	0.4	0.1	0.5
Buildings - New Construction	-	-	0.4	0.4
Miscellaneous	0.1	0.01	0.4	0.5
By Source of Financing				
Budget	3.1	0.4	0.4	3.9
Foreign Loans	-	-	0.5	0.5

In 1957 the main item was the construction of the Dire Dawa airport, in 1958 the maintenance of the airport Addis Ababa and in 1959 the completion of the Addis Ababa airport terminal and the abovementioned "Preliminary Report".

The Five-Year Plan has foreseen the amount of Eth.$ 15.5 million for development and modernization of airports, but the items so far implemented are lagging behind. Taking into account the programme elaborated in the "Preliminary Report" (Eth.$ 30 million for 28 airports in Phase I which should last 5-8 years) and distribution of the foreseen amount in a linear way, about Eth.$ 7.5 million might be spent in the subsequent two years (planned period) so that the Five-Year Plan will hardly be implemented unless special efforts are undertaken.

Ports and Sea Shipping

To enable the expected increase and development in port traffic the Five-Year Plan has envisaged the construction of the port of Assab. The construction works were launched in the year 1950 E.C., and, according to the contract, an investment of Eth.$ 26 million has been foreseen for its completion of which a half is financed from the Yugoslav loan. The construction of Assab Port is in good progress and in course of 1950 and 1951 E.C. the investments came to Eth.$ 8.5 million. However, this is less than envisaged by the Plan since the amount should have come to Eth.$ 13 600 000 by the end of 1951 E.C.

The new quay can already accommodate vessels up to 440 feet (ca 135 m .) long. Another portion of the new harbour will be completed in the very near future and this will bring the berthing space of this stage up to 1·460 feet (440 m) in addition to old facilities of 530 feet (160 m). Adequate covered storage is being built with a total floor space of 231 500 square feet (ca.21 000 sq.m.), one part of which is provided with refrigerating equipment. Seven portal cranes of a lifting capacity of 5 tons each have been ordered.

Traffic in the Ethiopian ports has been constantly increasing. The traffic carried out in the main ports of Assab and Massawa during the recent years was the following:

Traffic in the Port of Assab

	1955	1956	1957	1958
Number of Ships	396	405	504	605
Total Net Regist.Tonnage in th. . . .	493	506	577	974
Total Gross Regist.Tonnage in th . . .	764	1 019	737	1 614
Total Import in th.tons	50	54	71	67
Total Export in th.tons	90	83	99	158
Passengers In	378	388	390	409
Passengers Out	250	334	501	327

Traffic in the Port of Massawa

	1955	1956	1957	1958
Number of Ships	434	473	561	611
Total Net Regist.Tonage in th	855	864	1 090	1 424
Total Gross Regist.Tonnage in th . .	1 466	1 461	1 815	2 059
Total Import in th.tons	104	106	124	115
Total Export in th.tons	117	143	151	110
Passengers In	1 304	1 069	1 085	1 158
Passengers Out	1 825	1 848	1 754	1 899

The port of Massawa has the necessary facilities to handle the existing trade even with some surplus in capacity with its 6 berthing places, total length of 910 m., 6 cranes with 7 tons lifting capacity each and covered storage of 17 500 sq.m. floor space.

Ethiopian merchant shipping also showed some development and the merchant marine rose up to the total of 47 ships of which 2 ships between 1 000 and 2 000 GRT, 1 ship over 500 GRT, 9 ships of 100-400 GRT, and the remaining 35 ships smaller than 100 GRT.

Posts and Telecommunications

Telecommunications - It should be pointed out that in the Five-Year Plan under the title "Post and Telecommunications" the foreseen investment refers only to telecommunications. In terms of investment it could be stated that there was some lag in comparison to the Five-Year Plan dynamics. This lagging might not have occurred if the contract for the foreign loan had been signed in time. The negotiations regarding this foreign loan have been going on for two years. This fact affected adversely the implementation of the "Investment Programme" which was elaborated by the Imperial Board of Telecommunications comprising the period 1958-1960. This retardation brought about some modifications in the previously mentioned programme so that a new one is being elaborated comprising the period of 1960-1962. The works are expected to start early next year.

The table below shows the investments dynamics of the Five-Year Plan in relation to the investments undertaken during the period 1957-1959:

Investments in Telecommunications

Million Eth.$

	1949	1950	1951	1949-51
Dynamics of the Five-Year Plan	1.5	2.0	2.0	5.5
Actual Investments	1.4	1.4	1.7	4.5

As it could be seen the lag expressed in terms of investment costs amounts to Eth.$ 1 million.

Despite such a lag the implementation of the Five-Year Plan is not endangered on condition that the foreign loan are available in time.

Taking into account the concluded foreign loan the Five-Year Plan could be not only implemented but also surpassed. According to the "Investment Programme 1960 - 1962" in the two subsequent years Eth.$ 8.3 million will be invested so that during the planned period the amount would come to some Eth.$ 12,8 million as against Eth.$ 10 million foreseen by the Plan. In case of favourable conditions the Five-Year Plan has foreseen an additional investment of Eth.$ 3 million. Taking into account this additional amount the Five-Year Plan could be implemented.

In respect of sources of financing the Five-Year Plan has foreseen that about 40% will be financed from domestic and 60% from foreign sources. This proportion was not attained especially in the period concerned when domestic sources were represented by 92.2%. Concerning the domestic resources it should be pointed out that they represent the Imperial Board of Telecommunications' own revenue which is in such a way reinvested.

. Posts - The development of post activities is not covered by the Five-Year Plan. So, it would be advisable to elaborate a programme of development of post activities for the remaining period of the Five-Year Plan. A rough picture of the hitherto realized post development expressed in terms of investment costs is shown in the following table:

Investments in Posts

Thousand Eth.$

	1949	1950	1951	1949-51
Actual Investments,	622	619	643	1 884
Equipment	3	12	20	35
Vehicles	12	-	2	14
Miscellaneous	607	607	621	1 835

All these investments were financed from the budget. At present there exist in Ethiopia (including Eritrea) 68 post offices. The letter mail and parcel post show the following picture:

Letter Mail and Parcel Post

	Letter Mail		Parcels	
	Inland	Foreign	Inland	Foreign
1953 Gr.Cal.	607 472	926 008	2 236	237 390
1956 "	613 546	3 965 268	2 459	239 763
1957 "	619 681	4 004 920	2 704	242 060
1958 "	1 000 000	5 000 000	3 000	300 000

As it could be seen the post traffic is increasing at a considerable rate and an extension of post services i.e. by opening new offices seems necessary and corresponding funds should be allotted for the future period.

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XI. COMMUNITY DEVELOPMENT

In the Five-Year Plan the total development expenditure on Community Development Programme has been estimated at Eth.$ 25 million, out of which Eth.$ 20 million from the budget and Eth.$ 5 million from foreign sources.

It has been foreseen to cover by the Community Development Programme about 50 to 100 districts in the course of the five-year period. For each of those districts the following projects have been planned by the Community Development Programme (Doc.II CD-76):

- Improvement of development centres;
- Water supply;
- Rural roads;
- Land reclamation;
- Afforestation;
- Various small agricultural projects;
- Marketing and processing of agricultural products and rural crafts;
- Education;
- Health and sanitation; and
- Specific development activities in "Special Areas".

Development expenditure for the effectuation of the said projects has been estimated at Eth.$ 400 000 - 800 000 by district. Local contribution in labour has been roughly planned at about 50 per cent.

During the period 1949-1951 E.C. (ten months) the total budget of the Ministry of National Community Development exclusive of the contribution to the Welfare Trust, amounted to Eth.$ 1 342 507.- Yet according to the dynamics of the Five-Year Plan about Eth.$ 5 million on the average should have been invested every year. This shows that the implementation of the Five-Year Plan has not practically started in that sector yet the community development is considered from the Five-Year Plan point of view, which is characterized by a synchronized multipurpose work on the one hand, and by an active support and participation of the local population, on the other. The realization of such a concept of community development has required the co-ordination among those Ministries which should by the very nature of the community development participate in the execution of such programmes. This is particularly the case in education, health and sanitation, agriculture and forestry, water supply and to a certain degree in public works. Such a co-ordination by the Ministry of National Community Development was not realized although each Ministry more or less worked on the realization of its own projects on the local level. Due to the lack of co-ordination this kind of activity of the concerned Ministries could be named a singlepurpose activity, and could not be considered as the realization of the community development programme.

A picture of the activities of Ministries is given in the table below where the summary of expenditures (investments and operating costs) in the course of 1951 E.C. till June (Ministry of Education for years 1949, 1950 and up to June 1951 E.C.) is shown by sources of financing. Data as a rule represent actuals, but not the allotted amounts.

Amounts and Sources of Financing for Single-Purpose Community Development Activities

Thousand Eth.$

	Budget	FOREIGN SOURCES				Grand Total
		Econom. Assist.	Technic. Assist.	Internat. Organiz. Assist.	Total	
Agriculture	1 918	249	437	-	686	2 604
Education	1 875	-	1 129	225	1 354	3 229
Public Health	509	594	281	91	966	1 475
Regional Development	-	175	-	-	175	175
Well Drilling	405	-	322	-	322	727
TOTAL	4 707	1 018	2 169	316	3 503	8 210

Mention should be made, too, of the US Economic Assistance funds which have been allotated for the establishment of two community development and demonstration centres of which one will be located at Bahar Dar and the other near the lake Awasa. These funds amount to Eth.$ 700 000. They should have been spent in the course of the current year, but it is unknown how much of them has been effectively spent till now.

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XII EDUCATION

Enrolment and Output of Students

Primary Schools - In the course of the first three planned years the enrolment of students for the Government Primary Schools was considerably lagging behind the Five-Year Plan's targets. The number of students enrolled for the mentioned schools (Eritrea excluded) increased from 80 486 in 1948 E.C. to 98 707 in 1949 E.C., 110 108 in 1950 E.C., and to only 108 795 in 1951 E.C., as compared to 211 200 students as foreseen in the Five-Year Plan. Below is given the number of enrelled students by grades in 1951 E.C. compared with the level as foreseen for 1953 E.C.

Primary Schools Enrolment

	GRADE				Total
	1	2	3	4	
1951	50 381	26 165	19 466	12 983	108 995
Structure in %	46.2	24.o	17.9	11.9	1oo
1953 Plan	59 700	54 700	49 700	47 100	211 200
Structure in %	28.3	25.9	23.5	22.3	1oo

As seen above the foreseen expansion of Primary Schools was not realized in the course of the first three planned years but even a lag could be noticed in 1951 E.C. since the number of the enrolled students was for over a thousand lower than in 1950 E.C. No problem is encountered in the enrolment for Grade 1 where the teacher load and class size come to 68,but the planned increase failed in the other three Grades which lag far behind the Plan's tasks. The cause lies in the shortage of school room and teaching personnel, and particularly in the lack of financial means for the expansion of Primary Schools in provinces where they are financed from the Educational Tax.

The above figures exclude students in Eritrea and those attending non-government Primary Schools. The students enrolled for all kinds of Primary Schools in the whole of Ethiopia in 1951 E.C. totalled 146.6 thousand

(109.o thousand in Government Primary Schools in 12 Provinces and Addis Abeba, 20.3 thousand in government Primary Schools in Eritrea and 16.7 thousand in church mission, community and private Primary Schools in 12 provinces). Tentative estimates show only 10% of the 6 to 10 years old children attending Primary Schools.

Middle Schools - In 1951 E.C. 23 727 students attended the Government Middle Schools(Eritrea excluded). The foreseen level of 3 200 students in the last i.e. the Grade 8 of Middle Schools in 1953 E.C.(Eritrea excluded) was exceeded in 1951 E.C. already, when 4 270 students enrolled for the mentioned grade. Since 1948 E.C. the number of students enrolled for this Grade has increased for 2 374, i.e. it has been more than doubled. Over the 1948-1951 E.C. period the number of classroom units rose too, from 535 to 855, i.e. by about 60%.

Academic Secondary Schools -The last years showed a fair expansion of the Academic Secondary Schools and at present at least one of the kind is to be found in each provincial centre. Over the 1948-1951 E.C. period the number of students enrolled for Academic Secondary Schools in the whole of Ethiopia increased - from 2 097 to 4 496, i.e. by 114%. The level of 700 students to be enrolled for Grade 9 of the Academic Schools as foreseen by the Five-Year Plan was highly exceeded in 1951 E.C. already, when the entire country counted 2 104 students in the mentioned Grade showing thereby a rise of 114% as compared to 985 in 1948 E.C., 341 students were enrolled in Grade 12, i.e. the last Grade of the Academic Secondary Schools in 1951 E.C. whereas the Five-Year Plan has foreseen the Grade 13,i.e. the first Grade of the Schools of Higher Learning to count 280 students in 1953 E.C.(enrolment capacity should be 500 students).

Special Secondary Schools -The number of technicians graduated in the first three planned years was constantly increasing. During the five planned years the output has been estimated at 2 318 students while over the first three years 1 087 students graduated, representing 47%. The dynamics of the graduated (in large majority enrolled in Grade 12) by years and kinds of schools is below compared with the Five-Year Plan's tasks:

Special Secondary Schools Graduates

[illegible]	Estimated Output 1949-53	Enrolment in Grade 12				Difference 6-2
		1949	1950	1951	1949-51	
1	2	3	4	5	6	7
Commercial School	459	40	25	55	120	-339
Technical School	270	33	66	69	168	-102
Vocational Trade School . . .	470	89	101	88	278	-192
Agricultural Secondary Schools	287	65	72	79	216	-71
Middle School Teacher Training	571	78	69	89	236	-335
Nurses Schools	170	-	23	17	40	-130
Public Health Training College, Gondar	91	-	-	29	29	- 62
TOTAL . .	2 318	305	356	426	1 087	- 1 231

One may foresee that the Plan will be implemented both as a whole and by each school in respect of the graduated technicians, except for those from Commercial Schools, whose number will lag considerably behind the forecasts; the graduated from Nurses Schools will near the figures as planned if the graduated nurses in Eritrea are taken into account.

Even if 200 technicians graduated abroad are added to the home graduates the estimated needs in technicians will be far from meeting the planned figures, for their number should be increased by 1 000 at least. The capacity of Special Secondary Schools is not sufficient to meet all requirements but the planned output may be expected to be implemented.

Schools of Higher Learning - The number of students enrolled for Schools of Higher Learning also showed a constant increase over the last three-year period: from 466 students enrolled in 1949 E.C. the number rose to 605 in 1950 E.C., and to 760 in 1951 E.C. The number of degreed people showed a favourable trend, too: over the mentioned three years some 190 students graduated as compared to the forecasts of 440 planned for the five-year period. Below are given data on the last three years of these schools as compared with the Five-Year Plan's forecasts:

Schools of Higher Learning Graduates

Schools of Higher Learning	Estimated Output 1949-53	Enrolment in Grade 16				Difference 6-2
		1949	1950	1951	1949-51	
1	2	3	4	5	6	7
Faculty of Arts	49	24	25	35	84	+ 35
Engineering College	110	-	7	12	19	- 91
Faculty of Science	23	6	2	1	9	- 14
Building Institute	72	-	-	11	11	- 61
Agricultural College	128	11	17	28	56	- 62
Secondary Teacher Training School	58	-	-	11	11	- 47
TOTAL	440	41	51	98	190	-250

One may foresee that the total number of degreed people will almost be attained. In the last three years the graduates from the Faculty of Arts highly exceeded the number envisaged for the planned five-year period. One may also expect that the planned number of agronomists will be realized too. The degreed from the Faculty of Arts and Secondary Teachers Training School will almost attain their planned number, whereas those from the Engineering College and Building Institute will lag considerably behind the Plan. It should be mentioned that the number of degreed people still cannot be to the full available to the administrative service and enterprises because they are in a fair number sent abroad for further studies or specialization. The planned requirements in degreed people for the five-year period of 600-800 will hardly be realizable despite the fact that 200 degreed people are expected to return from abroad.

Teachers Training -In the course of the last years one could notice a fair increase in teaching personnel both Ethiopian and foreign as shown in the following survey (classification of teachers by schools is almost impossible, the schools being combined from Grade 1 to 12):

Teachers

	1949	1950	1951
Ethiopians	3 239	3 627	4 093
Foreigners	484	469	630
TOTAL -	3 723	4 096	4 723

Consequently, over the last two years the number of Ethiopian teachers increased for more than 850 and of foreign for about 150 (particularly in Secondary Schools in 1951 E.C.) totalling thus a rise of a thousand teachers. Below are given data on teachers graduated from various Teachers Schools:

Graduated Teachers

	1949	1950	1951	1949-51
One-Year Teacher Training School	180	222	118	520
Community Teacher Training School	114	220	241	575
Four-year Teacher Training Schools	78	68	89	235
Secondary Teacher Training Schools	-	-	20	20
TOTAL	372	510	468	1 350

The Five-Year Plan has foreseen a yearly output of 320 graduated teachers. This number is every year exceeded but still behind the level requested for the realization of the planned enrolment of children for Primary Schools. In order to attain the teaching personnel as desired for the planned expansion of Primary Schools they should increase three times in number over the coming two years or a total of 2 000 new teachers should be engaged. The expansion of the Academic Secondary Schools was implemented by engagement of new foreign teachers in 1951 E.C. Another reason speaks in favour of the promptest possible training of the domestic teachers; in 1949 E.C. the expenditures on 400 foreign teachers in Ethiopia (Eritrea excluded) amounted to Eth.$ 3.8 million and those on 2 450 Ethiopians to some Eth.$ 3 million. This requests the question of replacement of foreign teachers by the Ethiopian ones be solved as soon as possible. Another problem needing solution is how to keep the Primary Schools teachers who often resign profession due to low salaries.

Financing of Education

Budgetary Expenditure -According to the Five-Year Plan it has been foreseen to spent on education Eth.$ 126.4 million from the budget, out of which Eth.$ 80.4 million for National Education and Eth.$ 45 million for Provincial Elementary Education covered by the Educational Tax. The funds spent in the last three years in comparison with the Five-Year Plan are given below:

National and Provincional Education Expenditure

Million Eth.$

	Five-Year Plan	ACTUALS				%
		1949	1950	1951	1949-51	6:2
1	2	3	4	5	6	7
National Education 1)	81.4	11.2	14.4	19.6	54.2	56
Provincial Education covered by Educational Tax . . .	45.0	5.4	5.2	(5.4)	16.0	36
TOTAL	126.4	16.6	19.6	25.0	61.2	48

1) Here are included actual budgetary expenditures of the Ministry of Education and Fine Arts minus expenditure covered by Educational Tax plus Ethiopian contribution to the Joint Fund.

The breakdown of the total amount spent on education in the last three years is as follows:

Budgetary Expenditure Actuals on Education 1)

Million Eth.$

	1949	1950	1951
Head Office	0.7	1.2	3.9
Schools in Addis Ababa	5.2	7.3	6.1
Schools in 12 Provinces	1.3	1.4	5.5
Elementary Schools in 12 Provinces, covered by Educational Tax	5.2	5.2	(5.4)
Community Schools	0.5	0.5	0.5
Students Abroad	1.7	1.9	1.3
Scholarship of H.I.M.	0.1	0.1	0.1
Grant-in-Aid to University College	1.2	1.5	1.5
Ethiopian Contribution to Joint Fund	0.7	0.5	(0.7)
Salaries	4.5	6.8	7.4
Capital Expenditure	2.8	1.4	3.7
Other Charges	9.3	11.4	13.9
TOTAL	16.6	19.6	25.0

1) Ministry of Education and Fine Arts data do not correspond to the data of the Ministry of Finance due to the different coverage.

The actuals of budgetary expenditure show that only 48% was spent in the first three years out of the total funds foreseen in the planned five-Year period. For Provincial Elementary Education only 36% was spent and as consequence of that a stagnation of primary education was registered. A big increase in expenditure from 1950 to 1951 E.C. was due to the expansion of the Academic Secondary Schools and contribution to the Swedish Assistance for the Building Institute and to various international organization projects.

The capital expenditure increased in the last three years as follows:

Budgetary Capital Expenditure on Education

Million Eth.$

	Five-Year Plan	ACTUALS				% 6:2
		1949	1950	1951	Total 1949-51	
1	2	3	4	5	6	7
New Buildings	...	2.2	0.7	3.0	5.9	...
Furniture	...	0.4	0.4	0.3	1.1	...
Repairs	...	0.2	0.3	0.4	0.9	...
TOTAL:	19	2.8	1.4	3.7	7.9	42

The actuals of capital expenditure in the last three years represented only 42% of the total amount foreseen for the five-year period.

Expenditures from Foreign Assistance Funds - In the Five-Year Plan the foreign sources have been foreseen only at an amount of Eth.$ 1 million for investments. Meanwhile, the foreign assistance was considerable in the last three years for education projects from various foreign sources. The table below shows all expenditures from foreign sources (the data are deficient and only estimates are given):

Foreign Assistance Expenditures on Education

Million Eth.$

	1949	1950	1951
Technical Assistance[1)] (US Contribution)	2.3	1.7	1.8
Economic Assistance	-	-	0.4
Ethio-Swedish Institute for Build.Technology[1)] .	0.3	0.4	0.5
The International Organizations Projects[1)2)] . .	0.2	0.3	0.3
TOTAL	2.8	2.4	3.0

1) Only estimates of expenditure from foreign sources are given; Ethiopian contributions to Joint Fund are excluded because they are included in budgetary expenditure in the data given before.

2) UNESCO,UNTAA,UNICEF, FAO projects.

It means that Eth.$ 8.2 was additionally spent on education from foreign funds,not foreseen in the Five-Year Plan.

The breakdown of the Joint Fund expenditure for Technical Assistance projects is given below:

Technical Assistance Expenditures on Education

Thousand Eth.$

	1949	1950	1951
Education Advisory Service	522	366	560
Teacher Education Projects	823	306	271
Women Education Project	1	66	65
Trade Education Project,Addis Ababa	(100)	113	92
Trade Education Project,Eritrea	(150)	(150)	162
TOTAL	1 596	1 001	1 150
Students abroad paid by US Government	218	384	195
Experts paid by US Government	1 225	805	1 150
GRAND TOTAL	3 039	2 190	2 495

All Economic Assistance projects for education which include various schools projects,Mapping and Geographical Institute,Public Administration Institute and some other projects are comprised in capital expenditure. These funds comprise 2.4 million Eth.$ but only about Eth.$ 0.4 million was spent.

From the total Foreign Assistance expenditure for education it could be roughly calculated that about Eth.$1.5 million was spent as capital expenditure in the last three years(only Eth.$ 1 million foreseen in Five-Year Plan).

XIII. PUBLIC HEALTH

Financing of Public Health

The Five-Year Plan contains no special chapter on public health. Only global budgetary development costs have been foreseen by the Plan. Therefore, here are furnished only data on expenditures on Public Health. Domestic sources for health as shown here include budgetary expenditures of the Ministry of Public Health and contribution to the Joint Fund only, excluding other Ministries for their medical institutions, H.I.M. Welfare Trust for hospitals, and missions and private hospitals.

Budgetary Expenditure -The Five-Year Plan has foreseen that in 1953 E.C., i.e. in the last planned year, the budget of the Ministry of Public Health will come to Eth.$ 5 million excluding capital expenditure which should amount to Eth.$ 10 million.

The next survey shows the movement of budgetary expenditure of the Ministry of Public Health in the course of the first three planned years:

Actual Budgetary Expenditures on Public Health

Million Eth.$

	1949	1950	1951[1]	Plan 1953
Head Office	1.1	1.3	1.7	...
Grant in Aid to Pasteur Institute . .	0.3	0.3	0.3	...
Hospitals and Clinics	2.6	2.9	3.3	...
TOTAL	4.0	4.5	5.3	...
Various Projects[2]	0.6	0.3	0.6	...
GRAND TOTAL	4.6	4.8	5.9	5.0[3]

1) Estimates.

2) Ethiopian constribution mostly to various international organizations projects.

3) Exclusive of capital expenditure.

As it may be seen, the budget of the Ministry of Public Health has increased in the course of recent years and the amount of Eth.$ 5 million (capital expenditure excluded) foreseen in the Plan for 1953 E.C. had been already attained by 1951 E.C. However, the capital expenditures financed by the budget were minimal in the first three planned years (see below). In 1949 E.C. Eth.$ 300 000 was allotted from the budget for the construction of pediatric clinic financed from the Ethio-Swedish Joint Fund but were utilized mainly in 1950 E.C.

This excludes the contribution of the Ethiopian Government to US Technical Assistance, which is estimated at some Eth.$ 500 000 in 1949 E.C., Eth.$ 600 000 in 1950 E.C. and some Eth.$ 700 000 in 1951 E.C. These are also budgetary funds not included in the budget of the Ministry of Public Health.

Foreign Assistance and Loans Expenditure - Expenditures on various health projects from foreign funds (some including Ethiopian contribution) in the course of the last three years (1949-1951 E.C.) were as follows:

Foreign Assistance and Loan Expenditures on Public Health

Million Eth.$

	1949	1950	1951
Technical Assistance (Joint Fund)	1.2	1.5	2.1
US Economic Assistance	-	0.2	0.6
Ethio-Swedish Joint Fund (Pediatric Clinic)	0.4	0.3	0.3
International Organizations Projects . .	0.9	1.0	1.2
Kovo Loan	-	-	0.3
TOTAL	2.5	3.0	4.5

The Technical Assistance covered the following projects: Health Training College at Gondar, Health Advisory Service, Malaria Survey and Control, Malaria Eradication, Nursing Education and Makale and Dessie Hospital. The American contribution here also includes salaries for experts, averaging Eth.$ 700 000 annually.

The US Economic Assistance mainly utilized in 1951 E.C. covered: Malaria Control, Gambela; Dressers Schools in Menelik Hospital; dormitory in Health Training College at Gondar; Health Centre, Debre Markos; Health

Training Centres, Gorgora, Dabat and Kolladuba, and Itegue Menen School of Nursing. Expenditures on these projects represent mainly the capital expenditure.

In addition to Ethiopian funds, the item "International Organizations" comprised the WHO and UNICEF assistance for the following projects: Health Training College, Venereal Diseases Control, Leprosy Control, Trachoma Control, Tuberculosis Control and B.C.G. Project. The WHO pays the experts and the UNICEF contributes in supplies and equipment.

Capital Expenditures - The capital expenditure covers the following amounts from the following sources:

Capital Expenditure on Public Health

Million Eth.$

	1948	1950	1951
Budget	0.2	0.4	0.1
Foreign Assistance and Loans	0.3	0.8	1.2
TOTAL:	0.5	1.2	1.3

In the first year the capital expenditure went mainly to Health Training Center at Gondar, in 1950 E.C. to the pediatric clinic in Addis Ababa and in 1951 E.C. to the projects of the US Economic Assistance and medical equipment from KOVO Loan (for hospitals in Asmara and Massawa).

Total Expenditure -The aboveshown expenditures of foreign assistance include the contribution of the Ethiopian Government to the US Technical Assistance (Joint Fund), to pediatric clinic and to nternational organizations projects. Expenditures on health institutions from domestic or foreign sources in the course of the last three years were as follows:

Total Expenditures on Public Health

Million Eth.$

	1948	1950	1951
Domestic Sources	5.1	5.4	6.6
Foreign Sources	1.4	2.1	3.2
TOTAI	6.5	7.5	9.8

The above table shows that both sources have been increasing.

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ANNEX I.

STATISTICAL TABLES

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1. SOME DEVELOPMENT TREND, 1948 - 1951 E.C.

	Unit	1948	1949	1950	1951	Plan 1953
BUDGET (Actuals)						
Revenue	million Eth.$	124	145	168	(161)	167
Domestic	"	123	136	141	(143)	...
Foreign	"	1	9	27	(18)	...
Expenditure	"	125	145	176	(188)	209
Domestic	"	124	130	146	(168)	...
Foreign	"	1	15	30	(20)	...
Salaries and Operat. Costs	"	...	111	134	(145)	...
Capital Expenditure	"	...	30	39	(36)	...
Others	"	...	4	3	(7)	...
Difference	"	- 1	0	- 8	(-27)	-42
MONETARY INVESTMENTS						
Total Investments	"	...	57	91	(89)	535[1]
Domestic Sources	"	...	44	60	(61)	296
Foreign Sources	"	...	13	19	(20)	198
Reparations	"	...	-	12	(8)	41
FOREIGN TRADE						
Export	"	156	177	170	170	228
Coffee	"	82	108	109	94	143
Other Export	"	74	69	61	76	85
Import	"	167	166	194	208	207
Consumption Goods & Goods in Process	"	...	135	144	(148)	136
Capital Goods	"	...	31	50	(60)	71
Trade Balance	"	-11	+11	-24	- 38	+21
BALANCE OF PAYMENT[2]						
Goods and Services					[3]	
Trade	"	-1.6	+19.1	-48.4	- 35	+8.0
Services	"	-9.6	-11.2	-16.6	- 21	-37.0
Gold proceeds	"	+1.5	+ 1.3	+ 2.5	+ 5	-
Balance	"	-9.7	+ 9.2	-62.5	- 51	-29.0
Movement of Capital						
Donations	"	+12.1	+16.8	+36.0	+ 39	+ 6.3
Loans (net)	"	+ 0.3	+ 5.9	+15.4	+ 13	+25.5
Other Transactions	"	+11.2	= 4.4	+10.2	- 1	+14.0
Errors and Omissions	"	- 6.1	-10.3	-16.7	- 10	-
Total Foreign Funds	"	+17.5	+ 8.0	+44.9	+ 41	+45.8
Holdings	"	+ 7.8	+17.2	-17.6	- 10	+16.8

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1) Plan 1949-1953 E.C.; 2) Gregorian Calendar from 10 of December till 9 of December next year; 3) The data are preliminary.

Source: Various Ministries and Agencies.

1. SOME DEVELOPMENT TRENDS, 1948-1951 E.C. (Continued)

	Unit	1948	1949	1950	1951	Plan 1953
AGRICULTURE						
Investments (public)	million Eth.$	...	1.5	1.1	1.7	24.7[1]
FORESTRY						
Investments (public)	"	...	0.2	0.4	0.6	2.8[1]
MINING						
Gold Production	kg.	(715)	(682)	(850)	(1394)	932
Investments	million Eth.$	...	1.0	0.3	1.6	37.6[1]
ELECTRICITY						
Capacity	th.kW	33	38	40	...	67
Production	mil.kWh	67	73	79	(86)	110
Investments	million Eth.$	...	2.7	14.5	10.0	43.3[1]
MANUFACTURING INDUSTRY						
Gross Output	million Eth.$	72.5	83.1	83.3	...	175.5
Indices of Ind.Production	1948=100	100	112	115	...	-
Manpower	thousand	19.4	21.4	21.9	...	28.0
Investments	million Eth.$	...	5.0	6.0	13.6	57.1[1]
TRANSPORT AND COMMUNICATIONS						
Investments	million Eth.$	...	26.1	42.1	31.5	240.0[1]
Road Construction	"	...	9.2	13.3	11.5	120.0
New Construction	"	...	3.7	7.0	2.9	60.0
Maintenance	"	...	5.5	6.3	9.5	60.0
Aviation (excl.airports)	"	...	1.7	14.6	2.0	32.0
Ports	"	...	-	0.9	7.6	24.0
EDUCATION						
Enrolment[2]	thousand	95.2	117.9	134.7	140.7	-
Primary Schools	"	80.5	98.7	110.1	109.0	211.2
Middle Schools	"	11.1	14.5	18.8	23.7	-
Secondary Schools	"	3.2	4.2	5.2	7.2	-
Academic Sec.School .	"	1.8	2.3	2.9	3.9	-
Special Sec.School .	"	1.4	1.9	2.3	3.3	-
Schools of High.Learning	"	0.35	0.46	0.61	0.76	-
Classroom Units[2]	Number	2 550	2 874	3 207	3 405	-
Teachers	"	3 228	3 723	4 168	4 723	-
Investments	million Eth.$	...	3.5	1.8	4.2	20.0[1]
PUBLIC HEALTH						
Investments[3]	"	...	0.5	1.20	1.3	12.0[1]

1) Plan 1949-1953 E.C.; 2) Excluding Eritrea;

3) Ministry of Public Health Budget and Foreign Aid.

2. BUDGETARY REVENUE IN 1948 - 1951 E.C.

Million Eth.$

	Plan 1953	ACTUALS			
		1948	1949	1950	1951 estimates
Ordinary Revenue	167.0	122.1	134.6	140.3	142.0
Direct Taxes	45.0	26.4	25.4	26.7	28.0
Personal and Business Tax	...	6.8	6.2	7.5	...
Land Tax	...	4.8	5.0	4.8	...
Education Tax	...	4.8	4.6	4.4	...
Tithe	...	9.7	9.4	9.6	...
Cattle Tax	...	0.2	0.2	0.2	...
Other Direct Taxes . . .	...	0.1	-	0.2	...
Indirect Taxes	32.0	19.0	21.7	23.2	28.0
Excise Duty on Alcohol . .	...	3.9	5.3	5.9	...
Tobacco Monopoly	...	2.9	2.7	3.1	...
Motor Fuel Tax	...	5.6	}12.4	13.1	...
Toll Tax	...	5.2			...
Stamp Duties	...	1.2	1.2	1.1	...
Other Indirect Taxes . .	...	0.2	0.1	-	...
Custom Duties	52.0	45.7	47.4	48.4	48.0
Import Duties	...	33.0	33.9	36.0	...
Export Duties	...	12.7	13.5	12.4	...
Other Revenue	38.0	31.0	40.1	42.0	38.0
Federal Transaction Tax .	...	15.2	20.9	21.6	...
Federal Salt Tax	...	-	2.3	3.5	...
Federal Excise Tax on Sugar and Cotton	...	2.9	3.4	2.3	...
Court Fees and Fines . . .	...	2.1	2.3	2.5	...
Post, Telegraph and Telephone	...	1.6	1.5	1.8	...
Earnings of Governm. Departm.	...	3.3	3.1	3.3	...
Revenue from State Property	...	2.8	3.5	4.1	...
Miscellaneous Receipts . . .	...	0.6	0.9	0.6	...
Federal Revenue in Eritrea .	...	2.5	2.2	2.3	...
Extraordinary Revenue	34.0	1.8	10.5	27.7	19.0
Realization	...	0.5	0.3	-	...
Loans from IBRD	...	-	1.7	4.3	...
Loans from EXIM Bank	...	1.0	7.5	9.3	...
Credit for Port Assab Construct.	...	-	-	0.5	...
Koka Dam Project	...	-	-	12.8	...
Issue of Coins	...	0.3	1.0	0.8	...
TOTAL	201.0	123.9	145.2	168.0	161.0

Source: Ministry of Finance

3. BUDGETARY EXPENDITURE IN 1948 - 1951 E.C.

Million Eth.$

	Plan 1953	ACTUALS			
		1948	1949	1950	1951 estimates
Ordinary Expenditure	...	121.9	129.9	146.1	168.4
Civil List[2]	...	10.3	6.3	7.7	11.o
Prime Minister's Office . .	...	0.2	0.2	0.2	0.3
Ministry of Pen	...	0.2	0.2	0.2	0.2
Ministry of Foreign Affairs	...	3.9	3.5	4.7	5.8
Ministry of Interior . . .	...	18.9	19.9	23.6	26.o
Ministry of Justice	...	3.2	3.o	3.4	3.8
Ministry of Education . . .	...	13.9	15.5	17.1	25.2
Ministry of Public Health .	...	4.6	4.7	4.8	5.9
Ministry of National Defence	...	29.8	36.4	38.5	42.o
Ministry of Finance[3]	....	8.5	11.o	10.5	7.4
Ministry of Mines and St.Dom.	...	-	-	-	5.2
Office of Auditor General .	...	-	0.1	0.1	0.2
Ministry of Agriculture . .	...	1.1	1.o	1.6	2.6
Ministry of Com.and Industry	...	0.4	0.5	0.5	0.7
Ministry of Public Works .	...	10.2	12.3	13.3	12.2
Ministry of Communications .	...	0.1	0.2	0.2	0.3
Civil Aviation Department .	...	2.6	1.1	2.o	2.5
Ministry of Posts	...	1.2	1.o	1.4	1.5
Ministry of Press and Inform.	...	1.8	1.2	1.1	1.4
Ministry of Community Develop	...	1.o	0.9	1.3	1.o
Ministry of Pension,Stores and Supplies	...	-	0.1	0.2	0.3
Econ.and Techn.Assist.Board .	...	-	-	0.1	0.2
Planning Board Office . . .	...	-	-	0.3	0.3
Office of War Reparations .	...	-	0.3	0.2	0.2
Federal Expend.in Eritrea .	...	5.6	4.4	5.5	-[3]
Eth.Contrib.to the Joint Fund	...	2.5	4.2	4.7	4.8
Repayment of Public Debt. ...	...	1.9	1.9	2.9	7.4
Extraordinary Expenditures	...	2.9	15.o	29.4	20.o
Capital Works and Investm..	...	-	5.8	1.9	-
Foreign Expenses Fin.by IBRD	...	1.o	1.3	4.3	5.o
Expenses Fin.by EXIM Bank .	...	-	6.2	9.3	0.5
Koka Dam Project	...	-	-	12.9	7.8
Assab Port Project	...	-	-	1.o	6.7
Others	...	1.9	1.7	-	-
TOTAL	209.o	124.8	144.9	175.5	188.4

1) Rough Preliminary Estimates.

2) Including House of Parliament, Ecclesiastical Office and National Library and Museum.

3) Distributed among particular departments.

4. INVESTMENTS IN 1949 - 1951 E.C.

Million Eth.$

	Plan 1949-53	1949	1950	1951	1949-51	% 6:2
1	2	3	4	5	6	7
Domestic Sources						
Agriculture and Forestry	38.3	3.5	4.1	4.0	11.6	30.3
Mining	8.6	0.1	0.1	1.2	1.4	16.3
Electricity	11.3	2.7	2.5	2.3	7.5	66.4
Manufactur.Industry	30.5	2.4	4.2	10.3	16.9	55.4
Transport & Communic.	104.0	18.7	27.9	19.6	66.2	63.7
Education	19.0	2.8	1.4	3.7	7.9	41.6
Public Health	10.0	0.2	0.4	0.1	0.7	7.0
Administration . . .	10.0	2.9	2.0	1.6	6.5	65.0
Housing	30.0	7.7	11.4	13.8	32.9	109.7
Others	34.0	3.0	6.3	4.4	13.7	40.3
TOTAL	295.7	44.0	60.3	61.0	165.3	55.9
Foreign Sources						
Agriculture and Forestry	4.8	1.4	1.0	1.8	4.2	87.5
Mining	29.0	0.9	0.2	0.4	1.5	5.2
Electricity	32.0	-	12.0	7.7	19.7	61.6
Manufactur.Industry .	26.6	2.6	1.8	3.3	7.7	28.9
Transport and Commun.	136.0	7.4	14.2	11.9	33.5	24.6
Education	1.0	0.7	0.4	0.5	1.6	160.0
Public Health	2.0	0.3	0.8	1.2	2.3	115.0
Administration	-	-	-	-	-	-
Housing	-	-	-	-	-	-
Others	7.5	-	-	1.1	1.1	14.7
TOTAL	238.9	13.3	30.4	27.9	71.6	30.0

1) All data represent estimates, specially those for 1951 E.C. which were compiled.

4. INVESTMENTS IN 1949 -1951 E.C.

(Continued)

Million Eth.$

	Plan 1949-53	1949	1950	1951	1949-51	% 6:2
1	2	3	4	5	6	7
Total Investments						
Agriculture and Forestry	43.1	4.9	5.1	5.8	15.8	36.9
Mining	37.6	1.0	0.3	1.6	2.9	7.7
Electricity	43.3	2.7	14.5	10.0	27.2	62.8
Manufactur. Industry	57.1	5.0	6.0	13.6	24.6	43.1
Transport & Communic	240.0	26.1	42.1	31.5	99.7	41.5
Education	20.0	3.5	1.8	4.2	9.5	47.5
Public Health	12.0	0.5	1.2	1.3	3.0	25.0
Administration . .	10.0	2.9	2.0	1.6	6.5	65.0
Housing	30.0	7.7	11.4	13.8	32.9	109.7
Others	41.5	3.0	6.3	5.5	14.8	35.7
TOTAL	534.6	57.3	90.7	88.9	236.9	44.3

5. EXPORTS IN 1949 - 1950 E.C.

Million Eth.$

	Plan						%
	1953	1949-53	1948	1949	1950	1949-50	7:3
1	2	3	4	5	6	7	8
Coffee	143.0	627.0	82.1	108.4	109.0	217.4	34.7
Cereals and Products	3.1	13.9	0.8	1.4	0.7	2.1	15.1
Oilseeds and Products	16.0	76.0	20.7	16.3	13.6	29.9	39.3
Pulses	12.0	55.0	6.6	8.6	7.6	16.2	29.5
Hides	6.5	26.7	3.6	2.7	3.3	6.0	22.5
Skins	13.0	61.0	12.3	12.6	11.7	24.3	39.8
Live Cattle	5.2	21.4	2.6	0.7	0.1	0.8	3.7
Chat	8.0	38.5	6.4	6.1	4.0	10.1	26.2
All Others	21.0	98.0	20.8	20.0	20.0	40.0	40.8
TOTAL	227.8	1 017.5	155.9	176.8	170.0	346.8	34.1

Source: Customs Head Office, Ministry of Finance

6. IMPORTS IN 1949 - 1950 E.C.

Million Eth.$

	Plan		1948	1949	1950	1949-50	% 7:3
	1953	1949-53					
1	2	3	4	5	6	7	8
Foodstuffs	5.6	34.0	13.4	11.0	13.3	24.3	71.5
Textile	44.8	252.4	54.0	57.4	54.3	111.7	44.3
Raw Cotton	7.0	34.0	4.1	6.7	4.8	11.5	33.8
Cotton Yarn	5.0	29.0	6.7	3.6	3.5	7.1	24,5
Cotton Manufactures	20.0	113.0	31.8	34.4	32.2	66.6	58,9
Chemicals	8.3	38.2	7.5	9.8	10.2	20.0	52.4
Fuel and Lubricants . .	24.0	98.0	17.1	18.4	21.6	40.0	40.8
Tyres (excl.bicycles) .	6.5	30.0	3.6	4.4	5.3	9.7	32.3
Rubber Manufactures . .	1.6	7.1	1.5	1.4	1.1	2.5	35.2
Paper and Print.Matters	4.2	19.5	3.1	3.2	4.3	7.5	38.5
Home and Offices Appliances, Instrum. . . .	7.0	28.5	4.8	4.6	5.3	9.9	34.7
Metal Manufactures . .	7.5	37.0	7.9	7.6	8.5	16.1	43.5
Semi-Finished Metals .	4.0	13.7	1.0	1.1	1.1	2.2	16.1
Transportation Means and Equip.(exc.passeng.)	36.7	161.5	10.3	7.7	20.9	28.6	17.7
Passengers cars	7.0	35.0	5.8	5.7	6.8	12.5	35.7
Capital Goods (mining, electricity,manufact. ind.and handicrafts)	23.0	100.8	14.1	14.2	17.5	31.7	31.4
Agricultural Machinery	3.5	10.2	1.8	1.2	3.5	4.7	46.1
Building Materials . .	11.0	46.0	6.5	5.8	7.0	12.8	27.8
Others	12.6	48.4	15.0	12.0	13.5	25.5	52.7
TOTAL	207.3	960.3	167.4	165.5	194.2	359.7	37.5

Source: Customs Head Office, Ministry of Finance.

7. MINING PRODUCTION

	Plan 1953	1948	1949	1950	1951
Gold Mines in kgs.	932.0	714.9	681.5	849.7	1 393.9
Kibre Mangist (Adola) . . .	700.0	583.1	544.1	742.1	1 283.1
Akobo	32.0	31.8	12.4	4.6	5.8
Ugaro	100.0	100.0	125.0	(103.0)	(105.0)
Other Gold Mines	100.0	...	...	...	...
Platinum - Yubdo in kgs. .	140.0	7.6	7.7	5.6	(8.0)
Salt Mines- thousand tons . .	13.0	(13.0)	(13.0)	(13.0)	(13.0)

Source: Ministry of Mines and State Domains.

8. ELECTRIC POWER PRODUCTION

Million kWh

	Plan 1953	1948	1949	1950	1951
Public Power Plants	110.0	52.4	58.1	63.1	(69.7)
Addis Ababa-Dire Dawa-Harar	61.4	30.5	34.2	37.8	(43.5)
Other Already Electrified Areas in 12 Provinces . .	2.6	2.4	2.7	2.9	(3.2)
Asmara-Massawa-Assab . . .	34.1	18.6	19.9	21.5	(22.0)
Other Already Electrified Areas in Eritrea	6.6	0.9	1.3	0.9	(1.0)
Areas in 12 Provinces and Eritrea to be Electrified	5.3	-	-	-	-
Industrial Plants	52.0	14.1	15.1	16.0	(16.0)
ETHIOPIA TOTAL	162.0	66.5	73.2	79.1	(85.7)

Source: Ethiopian Electric Light and Power Authority.

9. OUTPUT OF SOME PRODUCTS OF MANUFACTURING INDUSTRY IN 1948 - 1951 E.E.

	Unit	Plan 1953	1948	1949	1950	1951
Sugar	thousand tons	30.0	16.2	26.1	32.5	(36.1)
Meat	thousand tons	26.2	(3.0)	(1.9)1)	(3.1)1)	...
Flour	thousand tons	30.0	23.0	20.5	18.0	...
Milk	thousand tons	10.0	(1.5)	(1.5)	(1.3)	...
Beer	thousand hl.	38.0	41.8	42.2	51.0	(46.1)
Cotton Yarn . . .	thousand tons	6.5	2.3	3.5	3.2	(3.5)
Cotton Cloth (Abujedid & Drills)	million sq.m.	21.5	4.8	5.3	5.8	...
Blankets	tons	500	(90)	(113)	(143)	...
Sacs	million pcs.	3.0	(1.5)	(1.6)	(1.8)	(2.0)
Leather and Soles	tons	2 150	(565)	(584)	(587)	...
Leather and Footwear	thousand pairs	300	200	227	239	(211)
Soap	thousand tons	5.5	3.1	2.3	2.0	...
Oil Paints	tons	500	-	-	-	-
Matches	million boxes	13.0	11.8	14.7	15.5	(15.5)
Paper	tons	400	179	216	211	...
Sawn Timber	thousand c.m.	12.0	16.3	13.0	13.9	...
Wooden Products . .	million Eth.$	3.1	...	...	...	...
Glass Bottles . . .	thousand sq.m.	800	-	-	-	-
Cement	thousand tons	30	16.3	22.5	31.7	...
Bricks	million pcs.	12.5	3.7	4.0	5.5	...

1) Production of Slaughterhouse in Akaki not included.

Source: Statistical Section, Ministry of Commerce and Industry.

10. ENROLMENT IN ALL GOVERNMENT SCHOOLS IN 1948 - 1951 E.C.

Excluding Eritrea

	1948	1949	1950	1951
Primary Schools	80 486	98 707	110 108	108 995
Grade 1	44 625	52 632	54 345	50 381
Grade 2	18 229	23 619	26 795	26 165
Grade 3	10 776	13 877	17 833	19 466
Grade 4	6 806	8 579	11 135	12 983
Middle Schools	11 155	14 518	18 866	23 727
Grade 5	4 184	5 492	6 977	8 643
Grade 6	2 845	3 965	5 045	6 039
Grade 7	2 230	2 700	3 699	4 775
Grade 8	1 896	2 361	3 145	4 270
Secondary Schools	3 210	4 202	5 139	7 237
Grade 9	1 144	1 871	2 178	3 379
Grade 10	933	1 123	1 466	1 922
Grade 11	511	740	889	1 263
Grade 12	322	468	606	673
Academic Secondary Schools	1 831	2 294	2 874	3 889
Grade 9	788	1 017	1 392	1 880
Grade 10	593	684	719	1 114
Grade 11	274	410	457	567
Grade 12	176	183	306	328
Special Secondary Schools	1 379	1 908	2 265	3 348
Grade 9	656	854	786	1 499
Grade 10	340	439	747	808
Grade 11	237	330	432	696
Grade 12	146	285	300	345
Schools of Higher Learning	345	466	605	760
Grade 13	187	179	254	318
Grade 14	91	167	161	172
Grade 15	49	79	139	143
Grade 16	18	41	51	127
TOTAL	95 196	117 893	134 718	140 719

Source: Ministry of Education and Fine Arts.

10. CLASSROOM UNITS AND CLASS SIZE IN GOVERNMENT SCHOOLS 1948 - 1951 E.C.

Excluding Eritrea

	Classroom Units				Class Size			
	1948	1949	1950	1951	1948	1949	1950	1951
Primary Schools	1 874	2 037	2 228	2 265	43	48	49	48
Grade 1.	732	750	787	739	61	70	69	68
Grade 2	497	542	595	590	37	44	45	44
Grade 3	384	439	499	526	28	32	35	37
Grade 4	261	306	347	410	26	28	31	32
Middle Schools	535	635	737	855	21	23	26	28
Grade 5	185	221	254	295	23	25	26	29
Grade 6	139	172	198	224	21	23	25	27
Grade 7	117	132	157	182	19	20	23	26
Grade 8	94	110	128	154	20	21	25	28
Secondary Schools	120	169	199	254	27	25	26	28
Grade 9	49	67	74	104	29	28	29	32
Grade 10	33	46	55	71	28	24	21	27
Grade 11	20	31	39	49	26	24	23	26
Grade 12	18	25	31	30	18	19	20	22
Academic Secondary Schools	72	89	111	141	27	26	26	28
Grade 9	26	31	47	62	30	30	30	30
Grade 10	21	26	27	41	28	26	27	27
Grade 11	12	17	20	22	28	24	23	26
Grade 12	13	12	17	16	12	15	18	21
Special Secondary Schools	48	80	88	113	28	16	28	30
Grade 9	23	33	27	42	29	58	37	36
Grade 10	12	20	28	30	28	23	27	27
Grade 11	8	14	19	27	30	24	23	26
Grade 12	5	13	14	14	29	22	21	25
Higher Learning Institut.	21	33	43	33	16	14	14	25
Grade 13	8	8	11	9	23	22	23	35
Grade 14	6	10	11	9	15	17	15	19
Grade 15	5	9	10	8	10	9	14	18
Grade 16	2	6	11	7	9	7	5	18
All Schools	2 550	2 874	3 207	3 407	37	41	42	41

Source: Ministry of Education and Fine Arts

A N N E X II.

LIST OF DOCUMENTS ELABORATED BY THE PLANNING OFFICE RELATED TO THE IMPLEMENTATION OF THE FIVE - YEAR PLAN

1)	The Situation and Possibilities of the Uabi Shebelli Valley and Ogaden Area from the Agricultural Viewpoint, 1957, Pages 17	II Ag - 149
2)	Industrial Research in 1950 E.C. 3.X.1957, Pages 7	II I - 78
3)	The Analyses of Budgetary Revenue for 1950 E.C.	II Fi - 81
4)	Budgetary Expenditure in 1950 E.C. 11.XI.1957, Pages	II Fi - 82
5)	Depenses budgetaires en 1950, Pages 15	II Fi - 82
6)	Consideration in Establishing a Development Corporation, 25.X.1957, Pages 9	II Ad - 83
7)	Proposal for the Distribution of Technical and Economic Assistance Funds for 1949, 7.II.1957, Pages 8	II Ff - 59
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9)	Proposition pour la repartition des reparations, 26.VI.1957, Pages 5	II Ff - 70
10)	First Draft of the Annual Plan for 1949, 29.I.1957, Pages 42	II Pr - 58
11)	Annual Plan for 1949, 23.IV.1957, Pages 39	II Pr - 66
12)	Questionary for the Working Out of the Annual Plan 15.VII.1957, Pages 19	II Pr - 73
13)	Basic Tables for the Elaboration of the Annual Plan 1950 E.C. 8.X.1957, Pages 82	II Pr - 79
14)	Annual Plan for 1950, First Draft, 5.XII.1957, Pages 162	II Pr - 84
15)	Proposal for Constitution of Working Groups for the Elaboration of Agricultural Programmes and Studies, 25.VII.1958 Pages 4	II Ag - 110
16)	Agricultural Development Possibilities of the Awash River Valley, 1958, Pages 50	II Ag - 172
17)	Report on the Organization of the Agricultural Project for Zula, 1958, Pages 12	II Ag - 173
18)	Projet preliminaire de colonisation des anciens soldats dans la region Cofeire, Pages 13	II Ag - 179
19)	Provisions for Establishing and Organizing Agricultural Co-operative Farms for Army Veterans 1958, Pages 24	II Ag - 190
20)	Plan d'organisation economique du domaine agricole pres de Assela 1958, Pages 23	II Ag - 191
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22)	Preliminary Plan for the Production of 200,000 m.c. per year of cereals for Army Requirements (16)	II Ag - 215
23)	Preliminary Report on the Textile Factory to be Financed from the Reparation Funds,1958, Pages 34	II I - 168
24)	Report on the Paper Mill Establishing in Ethiopia, 35	II I - 203
25)	Preliminary Report on the Agordat-Tessenei Railway Line, September 1958, Pages 130	II T - 189
26)	Problem of the Coffee World Market and Position of Ethiopia 17.IX.1958, Pages 10	II Ft - 187
27)	Some Implications of the European Common Market with Particular Reference to Ethiopia, Pages 50	II Ft - 205
28)	Revised Budgetary Revenue for 1950, 28.I.1958,Pages 4	II Fi - 89
29)	Procedure and Terms proposed for the Elaboration of the Budget for 1951, 8.V.1958, Pages 6	II Fi - 94
30)	Standard Tables for the Elaboration of the Budget for 1951, 9.V.1958, Pages 7	II Fi - 95
31)	Budgetary Revenue Estimates for 1951,20.VIII.1958, Pages 30	II Fi - 108
32)	The Budget 1951 E.C., 1958, Pages 16	II Fi - 174
33)	Comments on Preliminary Report to the Directors on the Operations of the Development Bank of Ethiopia, 12.IX.1958,Pages 12	II Fi - 185
34)	Budget for 1951 E.C. 14.IX.1958,Pages 22	II Fi - 186
35)	Expenditure in Some Development Sectors in 1951 E.C., Pages 19	II Fi - 192
36)	Organization of the Ministry of Finance,Pages 33	II Fi - 193
37)	Funds for Education in 1951 E.C. 23.VIII.1958, Pages 13	II Ed - 109
38)	Programme of Enrolment for Primary Schools for the Planned Period 1949-1953 E.C.	II Ed - 111
39)	A proposal for Studying the Possibilities for Increasing the Tax Revenue, 4.VI.1958, Pages 7	II Fi - 97
40)	Some Problems Concerning the Improvement of the Present Budgetary Classification, 5.VI.1958, Pages 15	II Fi - 98
41)	Some Problems Concerning the Org.and Consolidation of Statistics, 6.I.1958, Pages 7	II Ad - 87
42)	Proposals for Improvement and Consolidation of Statistics, 14.II.1958, Pages 38	II Ad - 92
43)	Gen.Possibilities and Conditions of Using Development Loan Fund 31.I.1958, Pages 8	II Ff - 90
44)	Additional Report on Development Projects 1951-1953 E.C. 12.VII.1958, Pages 68	II Ff - 102
45)	Development Projects for 1951-1953 E.C.Proposed for Financing from Economic Assistance and Development Loan Fund, 20.VII.1958, Pages 86	II Ff - 107

46) Studies Proposed for Technical Assistance,Pages 3 . . . II Ff - 201

47) Appendix to the Annual Plan for 1950, 10.I.1958,Pages 74 II Pr - 88

48) Annual Plan for 1950 - Second Draft, 15.V.1958,Pages 190 II Pr - 96

49) Implementation of Five-Year Plan, June 1958, Pages 185 . II Pr - 100

50) Essential Development Tasks in 1951 E.C.First Draft, 4.VIII.1958, Pages 98 . . . . II Pr - 104

51) The Question of Implementation and Popularization of the Five-Year Plan, Pages 5 . . . . II Pr - 194

52) Development Possibilities of the Awash River Basin, Pages 35 . . . . II Pr - 197

53) Organization of the Agricultural Field Service by means of Agricultural Offices, Pages 3, January . . . . II Ag - 223

54) Study on Oil-Seed and Cotton Farms, Pages 24,February II Ag - 235

55) Castor Beans Plantations, Pages 17, March . . . . II Ag - 241

56) Study on Livestock Farms, Pages 16,March . . . . II Ag - 242

57) Flax Fibre Plantations, Pages 14, March . . . . . . II Ag - 245

58) Musa Fibre Plantation, Pages 10, March . . . . . . II Ag - 246

59) Land Settlement Programme, Pages 35, March . . . II Ag - 247

60) Report on the Possibilities of Local Production of Agricultural Implements and Tools, Pages 9, April . . II I - 252

61) Preliminary Report on the Meat Canning Plant,Pages 5, January . . . . II I - 227

62) Memorandum on the Ethiopian Shipping Company, Pages 3, February 1959 . . . . II T - 232

63) Preliminary Report on Possibility of Constructing Refinery in Ethiopia,Pages 40, February 1959 . . . . . . II I - 238

64) Problem of Plastics Factory in Ethiopia,Pages 24,April, 1959 . . . . II I - 253

65) Road Vehicles Assembly Plant, Pages 23, April, 1959 . . II I - 256

66) Steel Structure Plant, Pages 4, April, 1959 . . . . II I - 257

67) Preliminary Report on the Problem of Cement Production in Ethiopia, Pages 50, April, 1959 . . . . II I - 259

68) Metal Workshop for General Proposes, Pages 25,April 1959 II I - 260

69) Memorandum on the New Glass Factory,Pages 9, May 1959 . II I - 267

70) Memorandum on the New Ready-Made Clothing Factory, Pages 14, May 1959 . . . . II I - 268

71) Memorandum on the Wood Processing Plant,Pages 9,May 1959 II I - 269

72) Memorandum on the Establishment of a Sodium Carbonate (Soda Ash) Factory in Ethiopia,Pages 8, May 1959 . . . . . II I - 270

73) Memorandum on the Salt Electrolysis and Chloride of Lime Factory, Pages 8, May 1959 . . . . II I - 273

74) Memorandum on the Establishment of a Metal Hand Tools Plant in Ethiopia, Pages 6, May 1959 . . . . II I - 274

75) Memorandum on the Establishment of a Ceramic Factory in Ethiopia, Pages 6, May 1959 . . . . II I - 275

76) Memorandum on the Establishment of a Paint Factory, Pages 15, May 1959 . . . . II I - 279

77) Memorandum on the Establishment of a Building Hardware, May 1959 . . . . II I - 280

78) Study on Needs and Consumption of Building Material, Pages 20, April 1959 . . . . II C - 262

79) Proposal for the Organisation of the Foreign Trade Committee, Pages 7, April 1959 . . . . II Ft- 249

80) The Impact of the Coffee Prices on the Ethiopian Economy, Pages 34, April,1959 . . . . II Ft- 263

81) Balance of Payments Prospects (1951-1953 E.C.) Pages, 6, May 1959 . . . . II Ft- 276

82) Grain Storage, Pages 11, May 1959 . . . . II It- 271

83) Proposition Revisee des Projets a Financer du Development Loan Fund, Pages 22, February 1959 . . . . II Pr- 228

84) Problems Concerning Attraction of Foreign Investments to Ethiopia, Pages 25, April 1959 . . . . II Ff- 265

85) Road Construction Programme,Pages 20, May 1959 . . . . II T- 272

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89) Essential Economico-Technical Data on Selected Development Projects, Pages 25, April 1959 . . . . II Pr- 258

90) Caustic Soda and its Problems in the Ethiopian Economy, Pages 7 . . . . II I- 281

91) Measures Proposed for 1952 E.C. Aiming at the Implementation of the Five-Year Plan . . . . II Pr- 282

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93) Preliminary Estimates of a Caustic Soda Factory Operating for Exports, Pages 6 . . . . II I- 285

94) The Summary of Measures Proposed for 1952 E.C.Aiming at the Implementation of the Five-Year Plan, Pages 16 . . . II Pr- 287

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119) Proposed Land Development Programme and its Estimated Effects on Productivity of Agriculture, ... II Ag - 320

120) Study on the Long Term Development of Animal Husbandry. . II Ag - 321

121) Public Health Development Programme for 1952 and 1953 E.C. P.50

122) Education Statistics,1948-50 E.C.

123) Monthly Statistical Bullettin, No. 1, March,1959.

124) Monthly Statistical Bullettin, No. 2, May, 1959.

125) Monthly Statistical Bullettin, No. 3, July,1959.

126) Monthly Statistical Bullettin, No. 4, November 1959.

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